



Atlantic Richfield Company  
(a BP affiliated company)

P.O. Box 6549  
Moraga, California 94570  
Phone: (925) 299-8891  
Fax: (925) 299-8872

June 29, 2005

**Re: First Semi-Annual 2005 Groundwater Monitoring &  
Remediation System Operation & Maintenance Report  
ARCO Service Station #2035  
1001 San Pablo Avenue  
Albany, California  
ACEH Case #RO0000100**

Alameda County  
JUL 18 2005  
Environmental Health

I declare, that to the best of my knowledge at the present time, that the information and/or recommendations contained in the attached document are true and correct.

Submitted by:

A handwritten signature in black ink, appearing to read "Paul Supple".

Paul Supple  
Environmental Business Manager

June 29, 2005

Ms. Donna Drogas  
Alameda County Environmental Health (ACEH)  
1131 Harbor Bay Parkway, 2<sup>nd</sup> Floor  
Alameda, California 94502

**Re: First Semi-Annual 2005 Groundwater Monitoring &  
Remediation System Operation & Maintenance Report  
ARCO Service Station #2035  
1001 San Pablo Avenue  
Albany, California  
ACEH Case #RO0000100**

Dear Ms. Drogas:

On behalf of Atlantic Richfield Company, a BP affiliated company, URS Corporation (URS) is submitting the *First Semi-Annual 2005 Groundwater Monitoring and Remediation System Operation and Maintenance Report* for the ARCO Service Station #2035, which is located at 1001 San Pablo Avenue, Albany, California.

If you have any questions regarding this submission, please call me at (510) 874-3280.

Sincerely,

**URS CORPORATION**



Scott Robinson, P.G.  
Project Manager



Enclosure: First Semi-Annual 2005 Groundwater Monitoring and Remediation System Operation and Maintenance Report

cc: Mr. Paul Supple, RM, electronic copy uploaded to ENFOS  
Barbara and James A. Lestrange, Property Owner, 6 La Canada Court, St. Helena, CA 94574  
Muriel & Emile Turpin, Trustees, 2 La Canada Ct., Saint Helena CA 94574-1250  
Mr. Robert Cave, Bay Area Air Quality Management District – Permit Division, 939 Ellis St., San Francisco, CA 94109

**FIRST SEMI-ANNUAL 2005  
GROUNDWATER MONITORING  
AND REMEDIATION SYSTEM  
OPERATION AND  
MAINTENANCE REPORT**

**ARCO SERVICE STATION #2035  
1001 SAN PABLO AVENUE  
ALBANY, CALIFORNIA**

*Prepared for*  
**RM**

June 29, 2005



**URS Corporation  
1333 Broadway, Suite 800  
Oakland, California 94612**

Date: June 29, 2005  
Period: 2Q 05

## FIRST SEMI-ANNUAL 2005 GROUNDWATER MONITORING AND REMEDIATION SYSTEM OPERATION AND MAINTENANCE REPORT

Facility No.: 2035 Address: 1001 San Pablo Avenue, Albany, California  
RM Environmental Business Manager: Paul Supple  
Consulting Co./Contact Person: URS Corporation / Scott Robinson  
Primary Agency: Alameda County Environmental Health (ACEH)  
ACEH Case #: RO0000100

### WORK PERFORMED THIS PERIOD (Second – 2005):

1. Performed second quarter 2005 monitoring event on May 2, 2005.
2. Prepared and submitted this First Semi-Annual 2005 Groundwater Monitoring and Remediation System Operation and Maintenance (O&M) Report.
3. Performed monthly depth to water monitoring of all sparge vapor extraction (SVE) wells on January 6 and February 4.

### WORK PROPOSED FOR NEXT PERIOD (Third – 2005):

1. Prepare and submit Third Quarter 2005 Quarterly Status Report.
2. Perform O&M of SVE system and AS remediation system.

### SITE SUMMARY:

Current Phase of Project:	Remediation/GW monitoring/sampling
Frequency of Groundwater Sampling:	Annually (4 <sup>th</sup> quarter): MW-5 and MW-6 Semi-Annually (2 <sup>nd</sup> /4 <sup>th</sup> quarter): MW-1 through MW-4, RW-1, and S-5
Frequency of Groundwater Monitoring:	Semi-annual
Is Free Product (FP) Present On-Site:	No
Current Remediation Techniques:	AS/SVE
Approximate Depth to Groundwater:	8.58 (MW-1) to 12.25 (MW-6) feet
Groundwater Gradient (direction):	West
Groundwater Gradient (magnitude):	0.02 feet per foot
Equipment Inventory:	Therm Tech Model VAC-10 Thermal/Catalytic Oxidizer
Operating Mode:	Catalytic Oxidation
BAAQMD Permit #:	8694
TPH Conc. End of Period (lab):	NA (System shut down temporarily)
Benzene Conc. End of Period (lab):	NA (System shut down temporarily)
SVE Flowrate End of Period:	74 scfm
Total HC Destroyed This Period:	0.0 pounds NA (System shut down temporarily)
Total HC Destroyed to Date:	3,967 pounds
Utility Usage This Period	

Electric (kWh):	0
Gas (cu/ft):	0
Operating Hours This Period (SVE):	0
Operating Hours to Date (SVE):	23,392 Hours
Percent Operational This Period (SVE):	0%
Unit Maintenance:	Currently optimizing SVE system performance
Number of Auto Shut Downs:	NA (System shut down temporarily)
Destruction Efficiency Permit Requirement:	98.5% (POC >2,000 ppmv); 97% (POC >200 ppmv); 90% (POC <200 ppmv)
Percent TPH Conversion:	NA (System shut down temporarily)
Average Stack Temperature:	652° F
Average SVE Source Flow:	52 scfm
Average SVE Process Flow:	78 scfm
Average Source Vacuum:	20 in of H <sub>2</sub> O

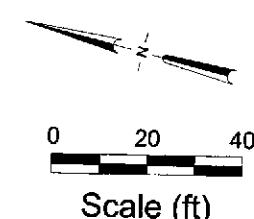
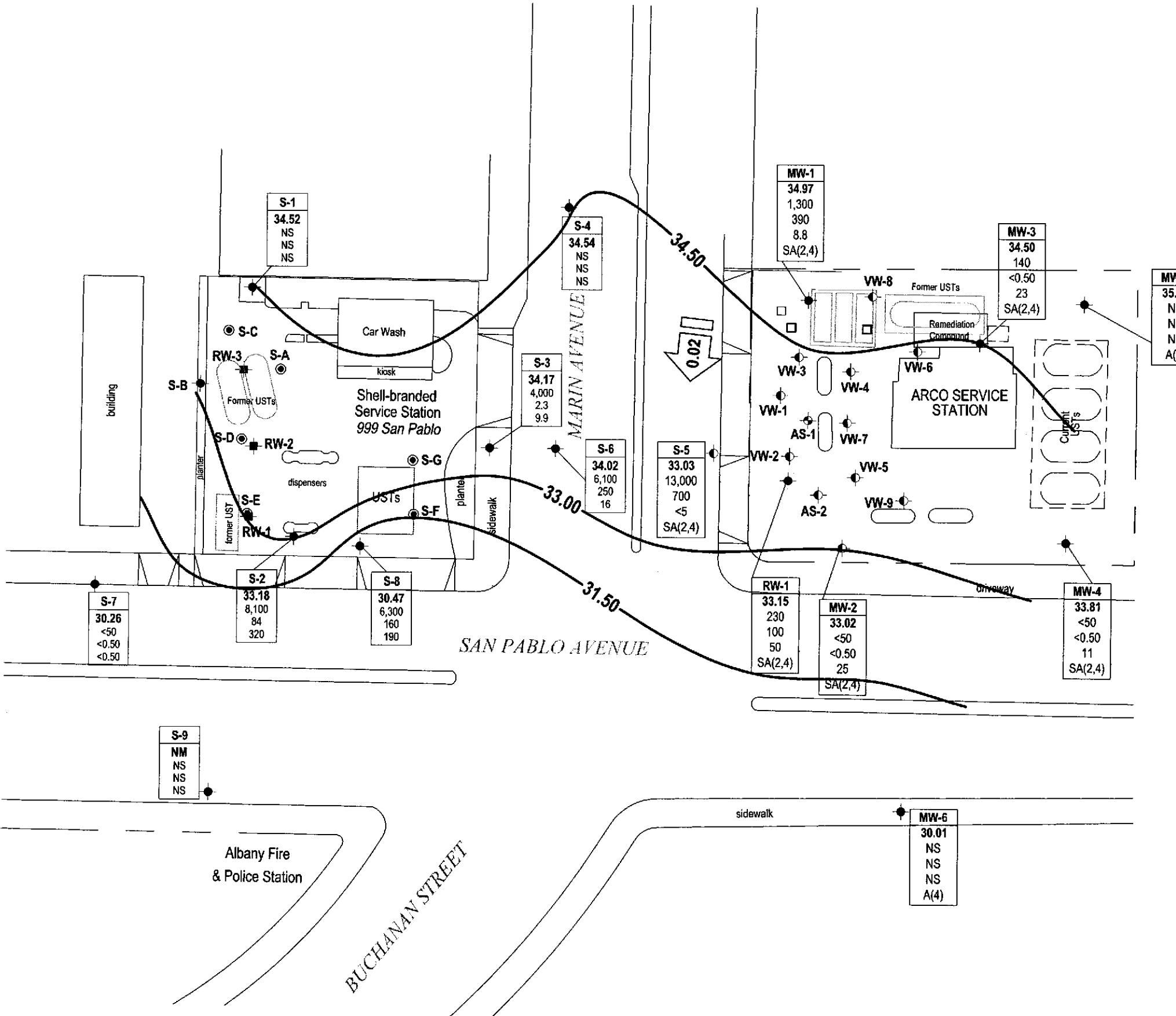
#### **DISCUSSION:**

Gasoline range organics were detected at or above laboratory reporting limits in four of the six wells sampled this quarter at concentrations ranging from 140 µg/L (MW-3) to 13,000 µg/L (S-5). Benzene was detected at or above laboratory reporting limits in three of the six wells sampled at concentrations ranging from 100 µg/L (RW-1) to 700 µg/L (S-5). Toluene was detected at or above laboratory reporting limits in one of the six wells sampled at a concentration of 18 µg/L (S-5). Ethylbenzene was detected at or above laboratory reporting limits in two of the six wells sampled at concentrations of 12 µg/L (MW-1) and 260 µg/L (S-5). Xylenes were detected at or above laboratory reporting limits in two of the six wells sampled at concentrations of 6.4 µg/L (MW-1) and 1,300 µg/L (S-5). Methyl-tert-butyl ether was detected at or above laboratory reporting limits in five of the six wells sampled at concentrations ranging from 8.8 µg/L (MW-1) to 50 µg/L (RW-1). Tert-butyl alcohol was detected at or above laboratory reporting limits in three of the six wells sampled at concentrations of 75 µg/L (MW-2 and MW-4) and 220 µg/L (MW-1). The following wells de-watered during sampling: MW-3 after 21 gallons and S-5 after 5.5 gallons.

The SVE system has remained shut down since the fourth quarter, 2004, due to elevated water levels observed at the Site. Monthly depth to water monitoring indicated that a majority of the well screens remained partly submerged under water. The monthly depth to water monitoring was discontinued after the February 2005 event. The results for January and February are included in Attachment A and summarized in Table 4. URS submitted a remediation treatment modification letter to ACEH on July 15, 2004 proposing to shut down the treatment system permanently and treat groundwater by natural attenuation and is awaiting the agency's approval.

#### **ATTACHMENTS:**

- Figure 1 – Groundwater Elevation Contour and Analytical Summary Map – May 2, 2005
- Table 1 – Groundwater Elevation and Analytical Data
- Table 2 – Fuel Additives Analytical Data
- Table 3 –Groundwater Flow Direction and Gradient
- Table 4 –Monthly Depth to Water Monitoring
- Attachment A – Field Procedures and Field Data Sheets
- Attachment B – Laboratory Procedures, Certified Analytical Reports, and Chain-of-Custody Records
- Attachment C – Historical Groundwater Data Tables
- Attachment D – Joint Monitoring Data
- Attachment E – Error Check Reports and EDF/Geowell Submittal Confirmations



Project No. 38487173  
ARCO Service Station #2035  
1001 San Pablo Avenue  
Albany, California

GROUNDWATER ELEVATION CONTOUR  
AND ANALYTICAL SUMMARY MAP  
Second Quarter 2005 (May 2, 2005)

FIGURE  
1

**Table 1**  
**Groundwater Elevation and Analytical Data**  
**ARCO Service Station #2035**  
**1001 San Pablo Ave., Albany, CA**

Well No.	Date	P/NP	TOC (ft MSL)	DTW (ft bgs)	Product Thickness (feet)	GWE (ft MSL)	GRO/TPH-g ( $\mu\text{g/L}$ )	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethyl-benzene ( $\mu\text{g/L}$ )	Total Xylenes ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	DO (mg/L)	Lab	pH	Comments
MW-1	4/11/2002	P	41.41	10.73	--	30.68	800	360	<5.0	<5.0	<5.0	<50	--	--	--	
	11/27/2002	P	41.41	10.22	--	31.19	<50	<0.50	<0.50	<0.50	<0.50	1.7	1.1	--	--	
	6/3/2003	--	41.41	9.14	--	32.27	1,700	430	<5.0	24	11	8.6	1.7	--	--	
	11/13/2003	P	43.55	10.17	--	33.38	<50	<0.50	<0.50	<0.50	<0.50	0.95	2.3	SEQM	6.5	a
	05/12/2004	P	43.55	9.28	--	34.27	120	7.2	<0.50	<0.50	<0.50	3.0	1.6	SEQM	6.0	
	12/01/2004	P	43.55	9.16	--	34.39	<50	0.94	<0.50	<0.50	1.1	2.4	5.2	SEQM	6.6	
	05/02/2005	P	43.55	8.58	--	34.97	1,300	390	<5.0	12	6.4	8.8	2.8	SEQM	6.5	
MW-2	4/11/2002	P	40.38	11.05	--	29.33	<50	<0.50	<0.50	<0.50	<0.50	24	--	--	--	
	11/27/2002	P	40.38	10.51	--	29.87	<50	<0.50	<0.50	<0.50	<0.50	5.4	2.6	--	--	
	6/3/2003	--	40.38	9.78	--	30.60	<50	<0.50	<0.50	<0.50	<0.50	23	1.7	--	--	
	11/13/2003	P	42.52	10.69	--	31.83	<50	<0.50	<0.50	<0.50	<0.50	9.5	2.3	SEQM	6.5	a
	05/12/2004	P	42.52	10.34	--	32.18	<250	<2.5	<2.5	<2.5	<2.5	27	2.2	SEQM	6.6	
	12/01/2004	P	42.52	10.28	--	32.24	<50	<0.50	<0.50	<0.50	0.70	17	3.9	SEQM	6.6	
	05/02/2005	P	42.52	9.50	--	33.02	<50	<0.50	<0.50	<0.50	<0.50	25	3.1	SEQM	6.6	
MW-3	4/11/2002	P	41.44	11.05	--	30.39	250	9.4	<0.50	<0.50	<0.50	120	--	--	--	
	11/27/2002	P	41.44	10.49	--	30.95	<100	<1.0	<1.0	<1.0	<1.0	2.5	56	2.2	--	--
	6/3/2003	--	41.44	9.44	--	32.00	130	<0.50	<0.50	<0.50	<0.50	47	4.1	--	--	
	11/13/2003	P	43.62	10.68	--	32.94	53	<0.50	<0.50	<0.50	<0.50	36	3.8	SEQM	6.8	a
	05/12/2004	P	43.62	9.95	--	33.67	65	<0.50	<0.50	<0.50	<0.50	39	4.2	SEQM	6.9	
	12/01/2004	P	43.62	10.32	--	33.30	140	<0.50	<0.50	<0.50	<0.50	37	4.3	SEQM	6.9	
	05/02/2005	P	43.62	9.12	--	34.50	140	<0.50	<0.50	<0.50	<0.50	23	3.1	SEQM	6.7	
MW-4	4/11/2002	NP	40.33	10.81	--	29.52	<50	<0.50	<0.50	<0.50	<0.50	11	--	--	--	
	11/27/2002	NP	40.33	10.09	--	30.24	<50	<0.50	<0.50	<0.50	<0.50	6.5	1.8	--	--	
	6/3/2003	--	40.33	8.62	--	31.71	<250	<2.5	<2.5	<2.5	<2.5	120	1.1	--	--	
	11/13/2003	NP	42.48	9.98	--	32.50	<50	<0.50	<0.50	<0.50	<0.50	20	1.3	SEQM	6.2	a
	05/12/2004	P	42.48	9.48	--	33.00	<250	<2.5	<2.5	<2.5	<2.5	79	2.9	SEQM	6.6	
	12/01/2004	NP	42.48	9.60	--	32.88	<50	<0.50	<0.50	<0.50	<0.50	1.8	1.9	SEQM	6.7	
	05/02/2005	NP	42.48	8.67	--	33.81	<50	<0.50	<0.50	<0.50	<0.50	11	2.8	SEQM	6.6	
MW-5	4/11/2002	NP	41.84	10.63	--	31.21	<50	<0.50	<0.50	<0.50	<0.50	<5.0	--	--	--	
	11/27/2002	NP	41.84	10.65	--	31.19	--	--	--	--	--	--	--	--	--	
	6/3/2003	--	41.84	8.92	--	32.92	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.8	--	--	
	11/13/2003	NP	44.03	10.58	--	33.45	<50	<0.50	<0.50	<0.50	<0.50	0.79	1.4	SEQM	5.7	a

**Table 1**  
**Groundwater Elevation and Analytical Data**  
**ARCO Service Station #2035**  
**1001 San Pablo Ave., Albany, CA**

Well No.	Date	P/ NP	TOC (ft MSL)	DTW (ft bgs)	Product Thickness (feet)	GWE (ft MSL)	GRO/TPH-g ( $\mu\text{g}/\text{L}$ )	Benzene ( $\mu\text{g}/\text{L}$ )	Toluene ( $\mu\text{g}/\text{L}$ )	Ethyl-benzene ( $\mu\text{g}/\text{L}$ )	Total Xylenes ( $\mu\text{g}/\text{L}$ )	MTBE ( $\mu\text{g}/\text{L}$ )	DO (mg/L)	Lab	pH	Comments
MW-5	05/12/2004	--	44.03	9.95	--	34.08	--	--	--	--	--	--	--	--	--	
	12/01/2004	NP	44.03	10.05	--	33.98	<50	<0.50	<0.50	<0.50	<0.50	0.55	1.8	SEQM	6.3	
	05/02/2005	--	44.03	8.75	--	35.28	--	--	--	--	--	--	--	--	--	
MW-6	4/11/2002	NP	40.13	11.42	--	28.71	<50	<0.50	<0.50	<0.50	<0.50	<5.0	--	--	--	
	11/27/2002	NP	40.13	13.11	--	27.02	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.3	--	--	
	6/3/2003	--	40.13	12.48	--	27.65	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.1	--	--	
	11/13/2003	NP	42.26	13.11	--	29.15	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.2	SEQM	6.8	a
	05/12/2004	--	42.26	12.68	--	29.58	--	--	--	--	--	--	--	--	--	
	12/01/2004	NP	42.26	12.68	--	29.58	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.7	SEQM	7.3	
	05/02/2005	--	42.26	12.25	--	30.01	--	--	--	--	--	--	--	--	--	
RW-1	4/11/2002	P	40.33	9.20	--	31.13	15,000	750	2,000	380	2,000	1,500	--	--	--	
	11/27/2002	P	40.33	10.31	--	30.02	<2,500	720	<25	<25	<25	<25	1.8	--	--	
	6/3/2003	--	40.33	9.54	--	30.79	470	78	0.97	4.3	9	48	1.4	--	--	
	11/13/2003	P	42.35	10.35	--	32.00	130	29	<0.50	<0.50	<0.50	44	1.3	SEQM	6.6	a
	05/12/2004	P	42.35	9.80	--	32.55	<250	66	<2.5	<2.5	<2.5	<2.5	1.9	SEQM	6.9	
	09/02/2004	--	42.35	10.42	--	31.93	--	--	--	--	--	--	--	--	--	
	10/07/2004	--	42.35	10.36	--	31.99	--	--	--	--	--	--	--	--	--	
	11/04/2004	--	42.35	9.93	--	32.42	--	--	--	--	--	--	--	--	--	
	12/01/2004	P	42.35	10.02	--	32.33	<250	96	<2.5	<2.5	<2.5	16	1.8	SEQM	6.7	
	05/02/2005	P	42.35	9.20	--	33.15	230	100	<1.0	<1.0	<1.0	50	2.5	SEQM	6.6	
S-5	4/11/2002	P	40.33	10.17	--	--	30,000	390	1,400	410	7,400	<500	--	--	--	
	11/27/2002	P	40.33	9.77	--	--	55,000	1,300	450	1,400	13,000	<50	4.3	--	--	
	6/3/2003	--	40.33	9.03	--	--	44,000	680	260	1,100	9,900	<25	1.9	--	--	
	6/3/2003	--	40.33	9.12	--	--	--	--	--	--	--	--	1.4	--	--	
	11/13/2003	P	41.83	9.12	--	32.71	31,000	520	120	690	5,900	<50	1.4	SEQM	6.5	a
	05/12/2004	P	41.83	9.95	--	31.88	28,000	760	79	910	5,000	<50	1.9	SEQM	6.6	
	12/01/2004	P	41.83	9.61	--	32.22	26,000	1,500	64	1,400	4,000	<25	--	SEQM	6.5	b
	05/02/2005	P	41.83	8.80	--	33.03	13,000	700	18	260	1,300	<5.0	1.8	SEQM	6.4	

**Table 1**

**Groundwater Elevation and Analytical Data**

ARCO Service Station #2035

1001 San Pablo Ave., Albany, CA

**ABBREVIATIONS & SYMBOLS:**

-- = Not analyzed/applicable/measured/available

< = Not detected at or above laboratory reporting limit

DO = Dissolved oxygen

DTW = Depth to water in feet below ground surface

GRO = Gasoline Range Organics, range C4-C12

GWE = Groundwater elevation measured in feet above mean sea level

mg/L = Milligrams per liter

MTBE = Methyl tert butyl ether

NP = Not Purged before sampling

P = Purged before sampling

TOC = Top of casing measured in feet above mean sea level

TPH-g = Total petroleum hydrocarbons as gasoline, analyzed using EPA Method 8015, Modified

ug/L = Micrograms per liter

SEQ/SEQM = Sequoia Analytical/Sequoia Morgan Hill Laboratories

**FOOTNOTES:**

a = Site resurveyed by URS on 10/15/03 to NAVD '88

b = Sheen

**NOTES:**

No sampling occurs at this site during the first and third quarters of each calendar year.

TPH-g analyzed using EPA Method 8015, Modified and BTEX and MTBE by EPA method 8260B.

Beginning in the fourth quarter 2003, the laboratory modified the reported analyte list. TPHg was changed to GRO. The resulting data may be impacted by the potential of non-TPHg analytes within the requested fuel range resulting in a higher concentration being reported.

Beginning in the second quarter 2004, the carbon range for GRO was changed from C6-C10 to C4-C12

Values for DO and pH were obtained through field measurements.

Source : The data within this table collected prior to August 2002 was provided to URS by RM and their previous consultants. URS has not verified the accuracy of this information.

Table 2

## Fuel Additives Analytical Data

ARCO Service Station #2035  
1001 San Pablo Ave., Albany, CA

Well Number	Date Sampled	Ethanol ( $\mu\text{g/L}$ )	TBA ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	DIPE ( $\mu\text{g/L}$ )	ETBE ( $\mu\text{g/L}$ )	TAME ( $\mu\text{g/L}$ )	1,2-DCA ( $\mu\text{g/L}$ )	EDB ( $\mu\text{g/L}$ )	Footnotes/Comments
MW-1	6/3/2003	<1000	<200	8.6	<5.0	<5.0	<5.0	<5.0	<5.0	
	11/13/2003	<100	<20	0.95	<0.50	<0.50	<0.50	--	--	
	05/12/2004	<100	<20	3.0	<0.50	<0.50	<0.50	<0.50	<0.50	
	12/01/2004	<100	<20	2.4	<0.50	<0.50	<0.50	<0.50	<0.50	
	05/02/2005	<1,000	220	8.8	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-2	6/3/2003	<100	<20	23	<0.50	<0.50	<0.50	0.94	<0.50	
	11/13/2003	<100	<20	9.5	<0.50	<0.50	<0.50	--	--	
	05/12/2004	<500	<100	27	<2.5	<2.5	<2.5	<2.5	<2.5	
	12/01/2004	<100	<20	17	<0.50	<0.50	<0.50	0.74	<0.50	
	05/02/2005	<100	75	25	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-3	6/3/2003	<100	<20	47	<0.50	<0.50	<0.50	<0.50	<0.50	
	11/13/2003	<100	<20	36	<0.50	<0.50	<0.50	--	--	
	05/12/2004	<100	<20	39	<0.50	<0.50	<0.50	<0.50	<0.50	
	12/01/2004	<100	<20	37	<0.50	<0.50	<0.50	<0.50	<0.50	
	05/02/2005	<100	<20	23	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-4	6/3/2003	<500	<100	120	<2.5	<2.5	<2.5	<2.5	<2.5	
	11/13/2003	<100	<20	20	<0.50	<0.50	<0.50	--	--	
	05/12/2004	<500	<100	79	<2.5	<2.5	<2.5	<2.5	<2.5	
	12/01/2004	<100	<20	1.8	<0.50	<0.50	<0.50	<0.50	<0.50	
	05/02/2005	<100	75	11	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-5	6/3/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
	11/13/2003	<100	<20	0.79	<0.50	<0.50	<0.50	--	--	
	12/01/2004	<100	<20	0.55	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-6	6/3/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
	11/13/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	--	--	
	12/01/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
RW-1	6/3/2003	<100	22	48	<0.50	<0.50	<0.50	<0.50	<0.50	
	11/13/2003	<100	<20	44	<0.50	<0.50	<0.50	--	--	
	05/12/2004	<500	<100	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	
	12/01/2004	<500	<100	16	<2.5	<2.5	<2.5	<2.5	<2.5	
	05/02/2005	<200	<40	50	<1.0	<1.0	<1.0	<1.0	<1.0	

**Table 2**

**Fuel Additives Analytical Data**

ARCO Service Station #2035  
1001 San Pablo Ave., Albany, CA

Well Number	Date Sampled	Ethanol ( $\mu\text{g/L}$ )	TBA ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	DIPE ( $\mu\text{g/L}$ )	ETBE ( $\mu\text{g/L}$ )	TAME ( $\mu\text{g/L}$ )	1,2-DCA ( $\mu\text{g/L}$ )	EDB ( $\mu\text{g/L}$ )	Footnotes/Comments
S-5	6/3/2003	--	--	--	--	--	--	--	--	
	6/3/2003	<5,000	<1,000	<25	<25	<25	<25	<25	<25	
	11/13/2003	<10,000	<2,000	<50	<50	<50	<50	--	--	
	05/12/2004	<10,000	<2,000	<50	<50	<50	<50	<50	<50	
	12/01/2004	<5,000	<1,000	<25	<25	<25	<25	<25	<25	
	05/02/2005	<1,000	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	

**Table 2**

**Fuel Additives Analytical Data**

ARCO Service Station #2035  
1001 San Pablo Ave., Albany, CA

**ABBREVIATIONS & SYMBOLS:**

-- = Not analyzed/applicable/measured/available  
< = Not detected at or above the laboratory reporting limit.

1,2-DCA = 1,2-Dichloroethane

DIPE = Di-isopropyl ether

EDB = 1,2-Dibromoethane

ETBE = Ethyl tert-butyl ether

MTBE = Methyl tert-butyl ether

TAME = tert-Amyl methyl ether

TBA = tert-Butyl alcohol

ug/L = Micrograms per Liter

**NOTES:**

All volatile organic compounds (Ethanol, TBA, MTBE, DIPE, ETBE, and TAME) analyzed using EPA Method 8260B.

Source : The data within this table collected prior to August 2002 was provided to URS by RM and their previous consultants. URS has not verified the accuracy of this information.

**Table 3**  
**Groundwater Gradient Data**  
ARCO Service Station #2035  
1001 San Pablo Ave., Albany, CA

Date Sampled	Approximate Flow Direction	Approximate Hydraulic Gradient
4/11/2002	Southwest	0.012
11/27/2002	West	0.021
6/3/2003	West	0.024
11/13/2003	West (offsite Northwest)	0.015
5/12/2004	* West	0.020
12/1/2004	West	0.030
5/2/2005	West	0.02

**NOTES:**

Site resurveyed by URS on 10/15/03 by datum NAVD '88.

The data within this table collected prior to August 2002 was provided to URS by RM and their previous consultants. URS has not verified the accuracy of this information.

**Table 4**  
**Monthly Depth To Water Data for Remediation System Wells**  
ARCO Service Station #2035  
1001 San Pablo Avenue, Albany, CA

Well Number	Date Sampled	Well Size (in)	Top of Screen (feet bgs)	Bottom of Screen (feet bgs)	Screen Length (feet)	Feet of Exposed Screen	Depth to Water (feet, TOC)	Depth to Well Bottom (feet)
<b>VW-1</b>	10/07/2004	4	5	17	12	5.27	10.27	15.65
	11/04/2004	4	5	17	12	4.65	9.65	15.73
	12/07/2004	4	5	17	12	4.62	9.62	15.76
	01/06/2005	4	5	17	12	0.94	5.94	15.70
	02/04/2005	4	5	17	12	3.12	8.12	15.75
<b>VW-2</b>	10/07/2004	4	5	17	12	5.50	10.50	15.30
	11/04/2004	4	5	17	12	4.89	9.89	15.26
	12/07/2004	4	5	17	12	4.94	9.94	15.32
	01/06/2005	4	5	17	12	0.10	5.10	15.20
	02/04/2005	4	5	17	12	3.69	8.69	15.34
<b>VW-3</b>	10/07/2004	4	5	10	5	1.95	DRY	6.95
	11/04/2004	4	5	10	5	1.47	6.47	6.93
	12/07/2004	4	5	10	5	0.85	5.85	6.93
	01/06/2005	4	5	10	5	0.00	2.70	6.95
	02/04/2005	4	5	10	5	0.73	5.73	7.01
<b>VW-4</b>	10/07/2004	4	5	15	10	4.65	9.65	15.70
	11/04/2004	4	5	15	10	3.55	8.55	15.65
	12/07/2004	4	5	15	10	3.74	8.74	15.71
	01/06/2005	4	5	15	10	0.00	4.40	15.70
	02/04/2005	4	5	15	10	1.94	6.94	15.68
<b>VW-5</b>	10/07/2004	4	4	15	11	2.67	6.67	14.00
	11/04/2004	4	4	15	11	0.00	2.54	13.91
	12/07/2004	4	4	15	11	0.00	2.52	13.97
	01/06/2005	4	4	15	11	0.00	2.29	13.95
	02/04/2005	4	4	15	11	0.00	2.60	13.98
<b>VW-6</b>	10/07/2004	4	5	12	7	3.18	8.18	12.15
	11/04/2004	4	5	12	7	3.42	8.42	12.10
	12/07/2004	4	5	12	7	3.27	8.27	12.11
	01/06/2005	4	5	12	7	0.50	5.50	12.09
	02/04/2005	4	5	12	7	0.00	4.68	12.10
<b>VW-7</b>	10/07/2004	4	6	15	9	4.01	10.01	14.52
	11/04/2004	4	6	15	9	3.02	9.02	14.55
	12/07/2004	4	6	15	9	2.66	8.66	14.60
	01/06/2005	4	6	15	9	0.00	5.60	14.55
	02/04/2005	4	6	15	9	0.73	6.73	14.61
<b>VW-8</b>	10/07/2004	4	6	15	9	3.42	9.42	14.20
	11/04/2004	4	6	15	9	2.60	8.60	14.18
	12/07/2004	4	6	15	9	2.51	8.51	14.25
	01/06/2005	4	6	15	9	0.00	4.17	14.20
	02/04/2005	4	6	15	9	0.24	6.24	14.14
<b>VW-9</b>	10/07/2004	4	6	15	9	4.42	10.42	14.10
	11/04/2004	4	6	15	9	3.78	9.78	14.19
	12/07/2004	4	6	15	9	1.89	7.89	14.14
	01/06/2005	4	6	15	9	0.00	5.90	14.08
	02/04/2005	4	6	15	9	0.21	6.21	14.12

**Table 4**  
**Monthly Depth To Water Data for Remediation System Wells**  
ARCO Service Station #2035  
1001 San Pablo Avenue, Albany, CA

Well Number	Date Sampled	Well Size (in)	Top of Screen (feet bgs)	Bottom of Screen (feet bgs)	Screen Length (feet)	Feet of Exposed Screen	Depth to Water (feet, TOC)	Depth to Well Bottom (feet)
<b>RW-1</b>	10/07/2004	6	11	26	15	0.00	10.36	25.40
	11/04/2004	6	11	26	15	0.00	9.93	25.48
	12/07/2004	6	11	26	15	0.00	9.78	25.53
	01/06/2005	6	11	26	15	0.00	8.00	25.45
	02/04/2005	6	11	26	15	0.00	8.96	25.45
<b>AS-1 (a)</b>	10/07/2004	2	5	14	10	2.48	DRY	7.48
	11/04/2004	2	5	14	10	2.48	DRY	7.48
	12/07/2004	2	5	14	10	2.50	DRY	7.50
	01/06/2005	2	5	14	10	0.40	5.40	7.75
	02/04/2005	2	5	14	10	1.69	6.69	7.84
<b>AS-2 (a)</b>	10/07/2004	2	5	14	10	0.35	DRY	5.35
	11/04/2004	2	5	14	10	0.49	DRY	5.49
	12/07/2004	2	5	14	10	0.43	DRY	5.43
	01/06/2005	2	5	14	10	0.15	5.15	5.52
	02/04/2005	2	5	14	10	0.47	DRY	5.47
<b>AS-1 (b)</b>	10/07/2004	2	29	31	2	0.00	10.71	30.42
	11/04/2004	2	29	31	2	0.00	10.21	30.38
	12/07/2004	2	29	31	2	0.00	10.11	30.42
	01/06/2005	2	29	31	2	0.00	8.35	30.40
	02/04/2005	2	29	31	2	0.00	9.05	30.36
<b>AS-2 (b)</b>	10/07/2004	2	29	31	2	0.00	10.63	31.28
	11/04/2004	2	29	31	2	0.00	10.45	31.28
	12/07/2004	2	29	31	2	0.00	10.12	31.34
	01/06/2005	2	29	31	2	0.00	8.18	31.30
	02/04/2005	2	29	31	2	0.00	9.27	31.20

**ATTACHMENT A**

**FIELD PROCEDURES AND FIELD DATA SHEETS**

## **FIELD PROCEDURES**

---

### **Sampling Procedures**

The sampling procedure for each well consists first of measuring the water level and depth to bottom, and checking for the presence of free phase petroleum product (free product), using either an electronic indicator and a clear Teflon™ bailer or an oil-water interface probe. Wells not containing free product are purged approximately three casing volumes of water (or until dewatered) using a centrifugal pump, gas displacement pump, or bailer. Equipment and purging method used for the current sampling event is noted on the attached field data sheets. During purging, temperature, pH, and electrical conductivity are monitored to document that these parameters are stable prior to collecting samples. After purging, water levels are allowed to partially (approximately 80%) recover. Groundwater samples (both purge and no purge) are collected using a Teflon bailer, placed into appropriate Environmental Protection Agency- (EPA) approved containers, labeled, logged onto chain-of-custody records, and transported on ice to a California State-certified laboratory. Wells with free product are not sampled and free product is removed according to California Code of Regulation, Title 23, Div. 3, Chap. 16, Section 2655, UST Regulations.

## WELL GAUGING DATA

Project # 050106-552 Date 1/6/05 Client Arco 2035Site 1001 San Pablo Ave Albany

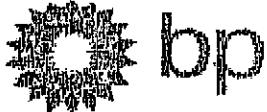
Well ID	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC
VW-1	4					5.94	15.70	
VW-2	4					5.10	15.20	
VW-3	4					2.70	6.95	no bolts
VW-4	4					4.40	15.70	missing 1 bolt 2 stripped tank
VW-5	4					2.29	13.95	no bolts
VW-6	4					5.50	12.09	
VW-7	4					5.60	14.55	no bolts
VW-8	4					4.17	14.20	no bolts
BW-1	6					8.00	25.45	no bolts
AS-1(a)	2					8.35	30.40	
AS-2(a)	2					8.18	31.30	
AS-1(b)	2					5.40	7.75	
AS-2(b)	2					5.15	5.52	
VW-9	4					5.90	14.08	no bolts
<u>uncapped wells prior to gauging.</u>								

# WELL GAUGING DATA

Project # 050104-DA2 Date 2/4/05 Client Arco 2035

Site 1001 San Pablo Ave. Albany, CA

Well ID	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	
VW-1	4					8.12	15.75	TBC	
VW-2	4					8.69	15.34		
VW-3	4					5.73	7.01		
VW-4	4					6.94	15.68		
VW-5	4					2.60	13.98		
VW-6	4					4.68	12.10		
VW-7	4					6.73	14.61		
VW-8	4					6.24	14.14		
VW-9	4					6.21	14.12		
RW-1	6					8.96	25.45		
AS-1(a)	2					9.05	30.36		
AS-2(a)	2					9.27	31.20		
AS-1(b)	2					6.69	7.84		
AS-2(b)	2					DRY	5.47		



## **WELLHEAD INSPECTION CHECKLIST**

### **BP / GEM**

Page 1 of 1

Date 2/6/05

**Site Address** 1001 San Pablo Ave. Albany, CA

Job Number 050204-DAZ Technician DA

Well ID	Well Inspected - No Corrective Action Required	Water Boiled From Wellbox	Wellbox Components Cleaned	Cap Replaced	Debris Removed From Wellbox	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)
VW-1							X	
VW-2							X	
VW-3							X	
VW-4							X	
VW-5							X	
VW-6							X	
VW-7							X	
VW-8							X	
VW-9							X	
RW-1							X	
AS-1(a)	X							
AS-2(a)	X							
AS-1(b)	X							
AS-2(b)	X							

NOTES: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## WELL GAUGING DATA

Project # 050502-552 Date 5/2/05 Client Deco 2035

Site 1001 San Pablo Ave Albany

**ARCO / BP WELL MONITORING DATA SHEET**

BTS #:	050503-552		Station #	2035																	
Sampler:	5000ft		Date:	5/2/05																	
Well I.D.:	MW-1		Well Diameter:	2	3	(4)	6	8													
Total Well Depth:	29.65		Depth to Water:	8.58																	
Depth to Free Product:			Thickness of Free Product (feet):																		
Referenced to:	PVC	Grade	D.O. Meter (if req'd):	YSI	HACH																
<table border="1"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius<sup>2</sup> * 0.163</td> </tr> </tbody> </table>		Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius <sup>2</sup> * 0.163				
Well Diameter	Multiplier	Well Diameter	Multiplier																		
1"	0.04	4"	0.65																		
2"	0.16	6"	1.47																		
3"	0.37	Other	radius <sup>2</sup> * 0.163																		

Purge Method: Bailer  
 Disposable Bailer  
 Positive Air Displacement  
 Electric Submersible  
 Extraction Pump  
 Other: \_\_\_\_\_

Sampling Method: Bailer  
 Disposable Bailer  
 Extraction Port  
 Other: \_\_\_\_\_

Top of Screen: \_\_\_\_\_ If well is listed as a no-purge, confirm that water level is below the top of screen. Otherwise, the well must be purged.

$$\frac{14}{1 \text{ Case Volume (Gals.)}} \times \frac{3}{\text{Specified Volumes}} = \frac{42}{\text{Calculated Volume}} \text{ Gals.}$$

Time	Temp (°F)	pH	Conductivity (mS or $\mu$ S)	Gals. Removed	Observations
1242	66.1	6.8	723	14	turbid
1245	65.8	6.5	783	28	clear
1248	65.9	6.5	799	42	turbid

Did well dewater? Yes  No  Gallons actually evacuated: 42

Sampling Time: 1251 Sampling Date: 5/2/05

Sample I.D.: MW-1 Laboratory: Pace Sequoia Other

Analyzed for: GRO BTEX MTBE DRO Other: oxy's, 6DB, 1,2-DCA & Ethanol all 8260

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	2.8 mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

**ARCO / BP WELL MONITORING DATA SHEET**

BTS #:	050502-552		Station #	2035																	
Sampler:	soot		Date:	5/2/05																	
Well I.D.:	MW-2		Well Diameter:	2	3	(4)	6	8													
Total Well Depth:	28.75		Depth to Water:	9.50																	
Depth to Free Product:			Thickness of Free Product (feet):																		
Referenced to:	PVC	Grade	D.O. Meter (if req'd):	YSI	HACH																
<table border="1"> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td><math>\text{radius}^2 * 0.163</math></td> </tr> </table>						Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	$\text{radius}^2 * 0.163$
Well Diameter	Multiplier	Well Diameter	Multiplier																		
1"	0.04	4"	0.65																		
2"	0.16	6"	1.47																		
3"	0.37	Other	$\text{radius}^2 * 0.163$																		

Purge Method: Bailer

Disposable Bailer

Positive Air Displacement

Electric Submersible

Extraction Pump

Other: \_\_\_\_\_

Sampling Method: Bailer

Disposable Bailer

Extraction Port

Other: \_\_\_\_\_

Top of Screen: \_\_\_\_\_ If well is listed as a no-purge, confirm that water level is below the top of screen. Otherwise, the well must be purged.

$$\frac{12.5}{1 \text{ Case Volume (Gals.)}} \times 3 = \frac{37.5}{\text{Specified Volumes}} = \frac{27.5}{\text{Calculated Volume}} \text{ Gals.}$$

Time	Temp (°F)	pH	Conductivity (mS or $\mu\text{S}$ )	Gals. Removed	Observations
1301	66.4	6.8	721	12.5	clear
1304	66.3	6.6	722	25.0	"
1307	66.4	6.6	723	27.5	"

Did well dewater? Yes No Gallons actually evacuated: 27.5

Sampling Time: 1312 Sampling Date: 5/2/05

Sample I.D.: MW-2 Laboratory: Pace Sequoia Other \_\_\_\_\_

Analyzed for: GRO BTEX MTBE DRO Other: oxy's, EDB, 1,2-DCA & Ethanol all 8260

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

**ARCO / BP WELL MONITORING DATA SHEET**

BTS #:	050502-552		Station #	2035																				
Sampler:	soocft		Date:	5/2/05																				
Well I.D.:	Mw-3		Well Diameter:	2	3	4	6	8																
Total Well Depth:	32.95		Depth to Water:	9.12	WT. = 13.89																			
Depth to Free Product:			Thickness of Free Product (feet):																					
Referenced to:	PVC	Grade	D.O. Meter (if req'd):	YSI	HACH																			
<table border="1"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius<sup>2</sup> * 0.163</td> </tr> </tbody> </table>		Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius <sup>2</sup> * 0.163							
Well Diameter	Multiplier	Well Diameter	Multiplier																					
1"	0.04	4"	0.65																					
2"	0.16	6"	1.47																					
3"	0.37	Other	radius <sup>2</sup> * 0.163																					

Purge Method: Bailer  
 Disposable Bailer  
 Positive Air Displacement  
 Electric Submersible  
 Extraction Pump  
 Other: \_\_\_\_\_

Sampling Method: Bailer  
 Disposable Bailer  
 Extraction Port  
 Other: \_\_\_\_\_

Top of Screen: \_\_\_\_\_ If well is listed as a no-purge, confirm that water level is below the top of screen. Otherwise, the well must be purged.

$$\frac{15.5}{\text{1 Case Volume (Gals.)}} \times \frac{3}{\text{Specified Volumes}} = \frac{46.5}{\text{Calculated Volume}} \text{ Gals.}$$

Time	Temp (°F)	pH	Conductivity (mS or $\mu$ S)	Gals. Removed	Observations
1325	64.3	6.6	581	15.5	turbid
1328	well dewatered			21 gal	DTW = 2840
1435	65.1	6.7	621	—	DTW = 10.02

Did well dewater? Yes No Gallons actually evacuated: 21

Sampling Time: 1435 Sampling Date: 5/2/05

Sample I.D.: Mw-3 Laboratory: Pace Sequoia Other \_\_\_\_\_

Analyzed for: GEO BTEX MTBE DRO Other: OXY's, TDB, 1,2-DCA & Ethanol all 8250

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	3.1 mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

**ARCO / BP WELL MONITORING DATA SHEET**

BTS #:	050502-552		Station #	2035																	
Sampler:	soot		Date:	5/2/05																	
Well I.D.:	MW-4		Well Diameter:	2	3	4	6	8													
Total Well Depth:	25-05		Depth to Water:	8-67																	
Depth to Free Product:			Thickness of Free Product (feet):																		
Referenced to:	PVC	Grade	D.O. Meter (if req'd):	YSI	HACH																
<table border="1"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td><math>\text{radius}^2 * 0.163</math></td> </tr> </tbody> </table>						Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	$\text{radius}^2 * 0.163$
Well Diameter	Multiplier	Well Diameter	Multiplier																		
1"	0.04	4"	0.65																		
2"	0.16	6"	1.47																		
3"	0.37	Other	$\text{radius}^2 * 0.163$																		

Purge Method:  
 Bailer  
 Disposable Bailer  
 Positive Air Displacement  
 Electric Submersible  
 Extraction Pump  
 Other: \_\_\_\_\_

Sampling Method:  
 Bailer  
 Disposable Bailer  
 Extraction Port  
 Other: \_\_\_\_\_

Top of Screen: 6.5' If well is listed as a no-purge, confirm that water level is below the top of screen. Otherwise, the well must be purged.

GRAB		X	-3	=	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	
Time	Temp (°F)	pH	Conductivity (mS or <del>µS</del> )	Gals. Removed	Observations

1318	65.0	6.6	396	—	clear

Did well dewater? Yes \_\_\_\_\_ No \_\_\_\_\_ Gallons actually evacuated: \_\_\_\_\_

Sampling Time: 1318 Sampling Date: 5/2/05

Sample I.D.: MW-4 Laboratory: Pace Sequoia Other \_\_\_\_\_

Analyzed for: GRO BTEX MTBE DRO Other: Oxy's, EDB, 1,2-DCA & Ethanol all 8260

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	2.8 mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

**ARCO / BP WELL MONITORING DATA SHEET**

BTS #:	050502-552		Station #	2035																	
Sampler:	soot		Date:	5/2/05																	
Well I.D.:	RW-1		Well Diameter:	2	3	4	6	8													
Total Well Depth:	25.45		Depth to Water:	9.20																	
Depth to Free Product:			Thickness of Free Product (feet):																		
Referenced to:	PVC	Grade	D.O. Meter (if req'd):	YSI	HACH																
<table border="1"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius<sup>2</sup> * 0.163</td> </tr> </tbody> </table>		Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius <sup>2</sup> * 0.163				
Well Diameter	Multiplier	Well Diameter	Multiplier																		
1"	0.04	4"	0.65																		
2"	0.16	6"	1.47																		
3"	0.37	Other	radius <sup>2</sup> * 0.163																		

Purge Method: Bailer  
 Disposable Bailer  
 Positive Air Displacement  
 Electric Submersible  
 Extraction Pump  
 Other: \_\_\_\_\_

Sampling Method: Bailer  
 Disposable Bailer  
 Extraction Port  
 Other: \_\_\_\_\_

Top of Screen: \_\_\_\_\_ If well is listed as a no-purge; confirm that water level is below the top of screen. Otherwise, the well must be purged.

<i>24</i>	x	<i>3</i>	=	<i>72</i>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Conductivity (mS or $\mu$ S)	Gals. Removed	Observations
1344	67.3	6.8	689	24	clear
1349	68.0	6.4	731	48	"
1354	68.0	6.6	798	72	"

Did well dewater? Yes  No  Gallons actually evacuated: *72*

Sampling Time: *1358* Sampling Date: *5/2/05*

Sample I.D.: *RW-1* Laboratory: Pace  Sequoia  Other

Analyzed for: GRO  BTEX MTBE DRO Other: *Oxy's, EDB, 1,2-DCA & Ethanol all 8260*

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

**ARCO / BP WELL MONITORING DATA SHEET**

BTS #:	<b>050502-552</b>	Station #	<b>2035</b>
Sampler:	<b>5000ft</b>	Date:	<b>5/2/05</b>
Well I.D.:	<b>S-5</b>	Well Diameter:	<b>2</b> <b>3</b> <b>4</b> <b>6</b> <b>8</b>
Total Well Depth:	<b>15.70</b>	Depth to Water:	<b>8.80</b>
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	<b>PVC</b>	Grade	D.O. Meter (if req'd): <b>YSI</b> HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	$\text{radius}^2 * 0.163$

Purge Method: Bailer  
 Disposable Bailer  
 Positive Air Displacement  
 Electric Submersible  
 Extraction Pump  
 Other: \_\_\_\_\_

Sampling Method: Bailer  
 Disposable Bailer  
 Extraction Port  
 Other: \_\_\_\_\_

Top of Screen: \_\_\_\_\_ If well is listed as a no-purge, confirm that water level is below the top of screen. Otherwise, the well must be purged.

$$2.6 \text{ } \frac{\text{Gals.}}{\text{1 Case Volume (Gals.)}} \times 3 = 7.8 \text{ Gals.}$$

Specified Volumes                      Calculated Volume

Time	Temp (°F)	pH	Conductivity (mS or $\mu\text{S}$ )	Gals. Removed	Observations
1415	67.7	6.3	895	2.6	run red
1418	67.5	6.3	901	5.2	"
	well dewatered 2			5.5 gal	DW = 14.52
1422	68.2	6.4	911	—	clear

Did well dewater? **Yes** No Gallons actually evacuated: **5.5**

Sampling Time: **(422) (trash)** Sampling Date: **5/2/05**

Sample I.D.: **S-5** Laboratory: Pace **Sequoia** Other: \_\_\_\_\_

Analyzed for: **GRO** **BTEX** MTBE DRO Other: **OXY'S, EDB, 1,2-DCA & Ethanol all 8260**

D.O. (if req'd):	Pre-purge:	$\text{mg/L}$	Post-purge:	$\text{mg/L}$
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

**BP GEM OIL COMPANY TYPE A BILL OF LADING**

SOURCE RECORD BILL OF LADING FOR NON-HAZARDOUS PURGEWATER RECOVERED FROM GROUNDWATER WELLS AT BP GEM OIL COMPANY FACILITIES IN THE STATE OF CALIFORNIA. THE NON-HAZARDOUS PURGE-WATER WHICH HAS BEEN RECOVERED FROM GROUND-WATER WELLS IS COLLECTED BY THE CONTRACTOR, MADE UP INTO LOADS OF APPROPRIATE SIZE AND HAULED BY DILLARD ENVIRONMENTAL TO THE ALTAMONT LANDFILL AND RESOURCE RECOVERY FACILITY IN LIVERMORE, CALIFORNIA.

The contractor performing this work is BLAINE TECH SERVICES, INC. (BTS), 1680 Rogers Avenue, San Jose, CA 95112 (phone [408] 573-0555). Blaine Tech Services, Inc. is authorized by BP GEM OIL COMPANY to recover, collect, apportion into loads the Non-Hazardous Well Purgewater that is drawn from wells at the BP GEM Oil Company facility indicated below and deliver that purgewater to BTS. Transport routing of the Non-Hazardous Well Purgewater may be direct from one BP GEM facility to the designated destination point; from one BP GEM facility to the designated destination point via another BP GEM facility; from a BP GEM facility to the designated destination point via the contractor's facility, or any combination thereof. The Non-Hazardous Well Purgewater is and remains the property of BP GEM Oil Company.

This Source Record BILL OF LADING was initiated to cover the recovery of Non-Hazardous Well Purgewater from wells at the BP GEM Oil Company facility described below:

Station #

Station Address

Total Gallons Collected From Groundwater Monitoring Wells:

added equip.  
rinse water \_\_\_\_\_

any other  
adjustments \_\_\_\_\_

**TOTAL GALS.**  
**RECOVERED** 167

loaded onto  
BTS vehicle # 62

BTS event #

time date

650502-552 1500 5/2/95

signature 167

\*\*\*\*\*  
RECD AT

time date

BTS  
unloaded by  
signature 167

1615 5/2/95

**ATTACHMENT B**

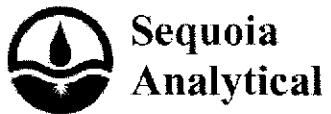
**LABORATORY PROCEDURES,  
CERTIFIED ANALYTICAL REPORTS,  
AND CHAIN-OF-CUSTODY RECORDS**

## **LABORATORY PROCEDURES**

---

### **Laboratory Procedures**

The groundwater samples were analyzed for the presence of the chemicals noted on the chain-of-custody using standard EPA Methods. The methods of analysis for the groundwater samples are documented in the certified analytical report. The certified analytical reports and chain-of-custody record are presented in this attachment. The analytical data provided by the laboratory approved by RM have been reviewed and verified by that laboratory.



885 Jarvis Drive  
Morgan Hill, CA 95037  
(408) 776-9600  
FAX (408) 782-6308  
[www.sequoiolabs.com](http://www.sequoiolabs.com)

---

17 May, 2005

Scott Robinson  
URS Corporation [Arco]  
1333 Broadway, Suite 800  
Oakland, CA 94612

RE: ARCO #2035, Albany, CA  
Work Order: MOE0064

Enclosed are the results of analyses for samples received by the laboratory on 05/03/05 13:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Lisa Race".

Lisa Race  
Senior Project Manager

CA ELAP Certificate #1210



885 Jarvis Drive  
Morgan Hill, CA 95037  
(408) 776-9600  
FAX (408) 782-6308  
[www.sequoialabs.com](http://www.sequoialabs.com)

URS Corporation [Arco]  
1333 Broadway, Suite 800  
Oakland CA, 94612

Project:ARCO #2035, Albany, CA  
Project Number:G0C26-0005  
Project Manager:Scott Robinson

MOE0064  
Reported:  
05/17/05 14:20

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	MOE0064-01	Water	05/02/05 12:51	05/03/05 13:00
MW-2	MOE0064-02	Water	05/02/05 13:12	05/03/05 13:00
MW-3	MOE0064-03	Water	05/02/05 14:35	05/03/05 13:00
MW-4	MOE0064-04	Water	05/02/05 13:18	05/03/05 13:00
RW-1	MOE0064-05	Water	05/02/05 13:58	05/03/05 13:00
S-5	MOE0064-06	Water	05/02/05 14:22	05/03/05 13:00
TB-05022005	MOE0064-07	Water	05/02/05 00:00	05/03/05 13:00

The carbon range for the TPH-GRO has been changed from C6-C10 to C4-C12. The carbon range for TPH-DRO has been changed from C10-C28 to C10-C36. EPA 8015B has been modified to better meet the requirements of California regulatory agencies.

These samples were received with intact custody seals.



885 Jarvis Drive  
Morgan Hill, CA 95037  
(408) 776-9600  
FAX (408) 782-6308  
[www.sequoiolabs.com](http://www.sequoiolabs.com)

URS Corporation [Arco]  
1333 Broadway, Suite 800  
Oakland CA, 94612

Project: ARCO #2035, Albany, CA  
Project Number: G0C26-0005  
Project Manager: Scott Robinson

MOE0064  
Reported:  
05/17/05 14:20

**Volatile Organic Compounds by EPA Method 8260B**  
**Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-1 (MOE0064-01) Water   Sampled: 05/02/05 12:51   Received: 05/03/05 13:00</b>									
tert-Amyl methyl ether	ND	5.0	ug/l	10	5E12009	05/12/05	05/13/05	EPA 8260B	
Benzene	390	5.0	"	"	"	"	"	"	"
tert-Butyl alcohol	220	200	"	"	"	"	"	"	"
Di-isopropyl ether	ND	5.0	"	"	"	"	"	"	"
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	"
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	"
Ethanol	ND	1000	"	"	"	"	"	"	"
Ethyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	"
Ethylbenzene	12	5.0	"	"	"	"	"	"	"
Methyl tert-butyl ether	8.8	5.0	"	"	"	"	"	"	"
Toluene	ND	5.0	"	"	"	"	"	"	"
Xylenes (total)	6.4	5.0	"	"	"	"	"	"	"
Gasoline Range Organics (C4-C12)	1300	500	"	"	"	"	"	"	"
Surrogate: 1,2-Dichloroethane-d4		94 %	60-135	"	"	"	"	"	"
<b>MW-2 (MOE0064-02) Water   Sampled: 05/02/05 13:12   Received: 05/03/05 13:00</b>									
tert-Amyl methyl ether	ND	0.50	ug/l	1	5E12009	05/12/05	05/13/05	EPA 8260B	
Benzene	ND	0.50	"	"	"	"	"	"	"
tert-Butyl alcohol	75	20	"	"	"	"	"	"	"
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	"
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	"
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	"
Ethanol	ND	100	"	"	"	"	"	"	"
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	"
Ethylbenzene	ND	0.50	"	"	"	"	"	"	"
Methyl tert-butyl ether	25	0.50	"	"	"	"	"	"	"
Toluene	ND	0.50	"	"	"	"	"	"	"
Xylenes (total)	ND	0.50	"	"	"	"	"	"	"
Gasoline Range Organics (C4-C12)	ND	50	"	"	"	"	"	"	"
Surrogate: 1,2-Dichloroethane-d4		87 %	60-135	"	"	"	"	"	"

Sequoia Analytical - Morgan Hill

The results in this report apply to the samples analyzed in accordance with the chain of custody document. Unless otherwise stated, results are reported on a wet weight basis. This analytical report must be reproduced in its entirety.

URS Corporation [Arcol]  
 1333 Broadway, Suite 800  
 Oakland CA, 94612

Project:ARCO #2035, Albany, CA  
 Project Number:G0C26-0005  
 Project Manager:Scott Robinson

MOE0064  
 Reported:  
 05/17/05 14:20

### Volatile Organic Compounds by EPA Method 8260B

#### Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-3 (MOE0064-03) Water Sampled: 05/02/05 14:35 Received: 05/03/05 13:00</b>									
tert-Amyl methyl ether	ND	0.50	ug/l	1	5E12009	05/12/05	05/13/05	EPA 8260B	
Benzene	ND	0.50	"	"	"	"	"	"	"
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	"
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	"
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	"
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	"
Ethanol	ND	100	"	"	"	"	"	"	"
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	"
Ethylbenzene	ND	0.50	"	"	"	"	"	"	"
Methyl tert-butyl ether	23	0.50	"	"	"	"	"	"	"
Toluene	ND	0.50	"	"	"	"	"	"	"
Xylenes (total)	ND	0.50	"	"	"	"	"	"	"
Gasoline Range Organics (C4-C12)	140	50	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		104 %	60-135	"	"	"	"	"	
<b>MW-4 (MOE0064-04) Water Sampled: 05/02/05 13:18 Received: 05/03/05 13:00</b>									
tert-Amyl methyl ether	ND	0.50	ug/l	1	5E12009	05/12/05	05/13/05	EPA 8260B	
Benzene	ND	0.50	"	"	"	"	"	"	"
tert-Butyl alcohol	75	20	"	"	"	"	"	"	"
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	"
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	"
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	"
Ethanol	ND	100	"	"	"	"	"	"	"
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	"
Ethylbenzene	ND	0.50	"	"	"	"	"	"	"
Methyl tert-butyl ether	11	0.50	"	"	"	"	"	"	"
Toluene	ND	0.50	"	"	"	"	"	"	"
Xylenes (total)	ND	0.50	"	"	"	"	"	"	"
Gasoline Range Organics (C4-C12)	ND	50	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		90 %	60-135	"	"	"	"	"	

URS Corporation [Arco]  
 1333 Broadway, Suite 800  
 Oakland CA, 94612

Project:ARCO #2035, Albany, CA  
 Project Number:G0C26-0005  
 Project Manager:Scott Robinson

MOE0064  
 Reported:  
 05/17/05 14:20

**Volatile Organic Compounds by EPA Method 8260B**  
**Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>RW-1 (MOE0064-05) Water Sampled: 05/02/05 13:58 Received: 05/03/05 13:00</b>									
tert-Amyl methyl ether	ND	1.0	ug/l	2	5E12009	05/12/05	05/13/05	EPA 8260B	
Benzene	100	1.0	"	"	"	"	"	"	"
tert-Butyl alcohol	ND	40	"	"	"	"	"	"	"
Di-isopropyl ether	ND	1.0	"	"	"	"	"	"	"
1,2-Dibromoethane (EDB)	ND	1.0	"	"	"	"	"	"	"
1,2-Dichloroethane	ND	1.0	"	"	"	"	"	"	"
Ethanol	ND	200	"	"	"	"	"	"	"
Ethyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	"
Ethylbenzene	ND	1.0	"	"	"	"	"	"	"
Methyl tert-butyl ether	50	1.0	"	"	"	"	"	"	"
Toluene	ND	1.0	"	"	"	"	"	"	"
Xylenes (total)	ND	1.0	"	"	"	"	"	"	"
Gasoline Range Organics (C4-C12)	230	100	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		98 %		60-135		"	"	"	
<b>S-5 (MOE0064-06) Water Sampled: 05/02/05 14:22 Received: 05/03/05 13:00</b>									
tert-Amyl methyl ether	ND	5.0	ug/l	10	5E13005	05/13/05	05/13/05	EPA 8260B	
Benzene	700	5.0	"	"	"	"	"	"	"
tert-Butyl alcohol	ND	200	"	"	"	"	"	"	"
Di-isopropyl ether	ND	5.0	"	"	"	"	"	"	"
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	"
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	"
Ethanol	ND	1000	"	"	"	"	"	"	"
Ethyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	"
Ethylbenzene	260	5.0	"	"	"	"	"	"	"
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	"
Toluene	18	5.0	"	"	"	"	"	"	"
Xylenes (total)	1300	5.0	"	"	"	"	"	"	"
Gasoline Range Organics (C4-C12)	13000	500	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		106 %		60-135		"	"	"	

Sequoia Analytical - Morgan Hill

The results in this report apply to the samples analyzed in accordance with the chain of custody document. Unless otherwise stated, results are reported on a wet weight basis. This analytical report must be reproduced in its entirety.



885 Jarvis Drive  
Morgan Hill, CA 95037  
(408) 776-9600  
FAX (408) 782-6308  
[www.sequoiolabs.com](http://www.sequoiolabs.com)

URS Corporation [Arco]  
1333 Broadway, Suite 800  
Oakland CA, 94612

Project:ARCO #2035, Albany, CA  
Project Number:G0C26-0005  
Project Manager:Scott Robinson

MOE0064  
Reported:  
05/17/05 14:20

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**  
**Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 5E12009 - EPA 5030B P/T / EPA 8260B**

Blank (5E12009-BLK1)	Prepared & Analyzed: 05/12/05						
tert-Amyl methyl ether	ND	0.50	ug/l				
Benzene	ND	0.50	"				
tert-Butyl alcohol	ND	5.0	"				
Di-isopropyl ether	ND	0.50	"				
1,2-Dibromoethane (EDB)	ND	0.50	"				
1,2-Dichloroethane	ND	0.50	"				
Ethanol	ND	100	"				
Ethyl tert-butyl ether	ND	0.50	"				
Ethylbenzene	ND	0.50	"				
Methyl tert-butyl ether	ND	0.50	"				
Toluene	ND	0.50	"				
Xylenes (total)	ND	0.50	"				
Gasoline Range Organics (C4-C12)	ND	50	"				

*Surrogate: 1,2-Dichloroethane-d4*      5.27      "      5.00      105      60-135

Laboratory Control Sample (5E12009-BS1)	Prepared & Analyzed: 05/12/05						
tert-Amyl methyl ether	10.1	0.50	ug/l	10.0	101	80-115	
Benzene	9.05	0.50	"	10.0	90	65-115	
tert-Butyl alcohol	51.0	20	"	50.0	102	75-150	
Di-isopropyl ether	10.4	0.50	"	10.0	104	75-125	
1,2-Dibromoethane (EDB)	8.68	0.50	"	10.0	87	85-120	
1,2-Dichloroethane	9.43	0.50	"	10.0	94	85-130	
Ethanol	128	100	"	200	64	70-135	HM
Ethyl tert-butyl ether	10.3	0.50	"	10.0	103	75-130	
Ethylbenzene	9.57	0.50	"	10.0	96	75-135	
Methyl tert-butyl ether	10.2	0.50	"	10.0	102	65-125	
Toluene	9.25	0.50	"	10.0	92	85-120	
Xylenes (total)	29.1	0.50	"	30.0	97	85-125	

*Surrogate: 1,2-Dichloroethane-d4*      4.62      "      5.00      92      60-135

Sequoia Analytical - Morgan Hill

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. Unless otherwise stated, results are reported on a wet weight basis. This analytical report must be reproduced in its entirety.*

URS Corporation [Arco]  
 1333 Broadway, Suite 800  
 Oakland CA, 94612

Project:ARCO #2035, Albany, CA  
 Project Number:G0C26-0005  
 Project Manager:Scott Robinson

MOE0064  
 Reported:  
 05/17/05 14:20

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**  
**Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
<b>Batch 5E12009 - EPA 5030B P/T / EPA 8260B</b>										
<b>Laboratory Control Sample (5E12009-BS2)</b>										
Prepared & Analyzed: 05/12/05										
Benzene	5.26	0.50	ug/l	6.08	87	65-115				
Ethylbenzene	7.85	0.50	"	7.84	100	75-135				
Methyl tert-butyl ether	10.0	0.50	"	9.60	104	65-125				
Toluene	35.1	0.50	"	32.9	107	85-120				
Xylenes (total)	40.0	0.50	"	38.5	104	85-125				
Gasoline Range Organics (C4-C12)	433	50	"	440	98	70-124				
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>5.36</i>		<i>"</i>	<i>5.00</i>	<i>107</i>	<i>60-135</i>				
<b>Laboratory Control Sample Dup (5E12009-BSD1)</b>										
Prepared: 05/12/05 Analyzed: 05/13/05										
tert-Amyl methyl ether	9.50	0.50	ug/l	10.0	95	80-115	6	15		
Benzene	9.65	0.50	"	10.0	96	65-115	6	20		
tert-Butyl alcohol	52.4	20	"	50.0	105	75-150	3	25		
Di-isopropyl ether	10.1	0.50	"	10.0	101	75-125	3	15		
1,2-Dibromoethane (EDB)	8.75	0.50	"	10.0	88	85-120	0.8	15		
1,2-Dichloroethane	10.1	0.50	"	10.0	101	85-130	7	20		
Ethanol	159	100	"	200	80	70-135	22	35		
Ethyl tert-butyl ether	9.91	0.50	"	10.0	99	75-130	4	25		
Ethylbenzene	10.2	0.50	"	10.0	102	75-135	6	15		
Methyl tert-butyl ether	10.1	0.50	"	10.0	101	65-125	1	20		
Toluene	10.2	0.50	"	10.0	102	85-120	10	20		
Xylenes (total)	30.7	0.50	"	30.0	102	85-125	5	20		
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>4.71</i>		<i>"</i>	<i>5.00</i>	<i>94</i>	<i>60-135</i>				
<b>Matrix Spike (5E12009-MS1)</b>										
Source: MOE0217-03 Prepared: 05/12/05 Analyzed: 05/13/05										
Benzene	253	25	ug/l	304	12	79	65-115			
Ethylbenzene	386	25	"	392	ND	98	75-135			
Methyl tert-butyl ether	440	25	"	480	3.5	91	65-125			
Toluene	1670	25	"	1640	ND	102	85-120			
Xylenes (total)	2000	25	"	1920	ND	104	85-125			
Gasoline Range Organics (C4-C12)	21700	2500	"	22000	2000	90	70-124			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>4.60</i>		<i>"</i>	<i>5.00</i>	<i>92</i>	<i>60-135</i>				



885 Jarvis Drive  
Morgan Hill, CA 95037  
(408) 776-9600  
FAX (408) 782-6308  
[www.sequoialabs.com](http://www.sequoialabs.com)

URS Corporation [Arco]  
1333 Broadway, Suite 800  
Oakland CA, 94612

Project: ARCO #2035, Albany, CA  
Project Number: G0C26-0005  
Project Manager: Scott Robinson

MOE0064  
Reported:  
05/17/05 14:20

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**  
**Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 5E12009 - EPA 5030B P/T / EPA 8260B**

Matrix Spike Dup (5E12009-MSD1)	Source: MOE0217-03			Prepared: 05/12/05		Analyzed: 05/13/05			
Benzene	266	25	ug/l	304	I2	84	65-115	5	20
Ethylbenzene	409	25	"	392	ND	104	75-135	6	15
Methyl tert-butyl ether	446	25	"	480	3.5	92	65-125	1	20
Toluene	1760	25	"	1640	ND	107	85-120	5	20
Xylenes (total)	2090	25	"	1920	ND	109	85-125	4	20
Gasoline Range Organics (C4-C12)	23000	2500	"	22000	2000	95	70-124	6	20
Surrogate: 1,2-Dichloroethane-d4	4.51		"	5.00		90	60-135		

**Batch 5E13005 - EPA 5030B P/T / EPA 8260B**

Blank (5E13005-BLK1)	Prepared & Analyzed: 05/13/05				
tert-Amyl methyl ether	ND	0.50	ug/l		
Benzene	ND	0.50	"		
tert-Butyl alcohol	ND	5.0	"		
Di-isopropyl ether	ND	0.50	"		
1,2-Dibromoethane (EDB)	ND	0.50	"		
1,2-Dichloroethane	ND	0.50	"		
Ethanol	ND	100	"		
Ethyl tert-butyl ether	ND	0.50	"		
Ethylbenzene	ND	0.50	"		
Methyl tert-butyl ether	ND	0.50	"		
Toluene	ND	0.50	"		
Xylenes (total)	ND	0.50	"		
Gasoline Range Organics (C4-C12)	ND	50	"		
Surrogate: 1,2-Dichloroethane-d4	4.85		"	5.00	97 60-135

Laboratory Control Sample (5E13005-BS1)	Prepared & Analyzed: 05/13/05				
tert-Amyl methyl ether	9.74	0.50	ug/l	10.0	97 80-115
Benzene	9.03	0.50	"	10.0	90 65-115
tert-Butyl alcohol	49.8	20	"	50.0	100 75-150
Di-isopropyl ether	9.90	0.50	"	10.0	99 75-125
1,2-Dibromoethane (EDB)	8.79	0.50	"	10.0	88 85-120
1,2-Dichloroethane	9.98	0.50	"	10.0	100 85-130
Ethanol	139	100	"	200	70 70-135
Ethyl tert-butyl ether	9.91	0.50	"	10.0	99 75-130
Ethylbenzene	9.53	0.50	"	10.0	95 75-135
Methyl tert-butyl ether	10.2	0.50	"	10.0	102 65-125

Sequoia Analytical - Morgan Hill

The results in this report apply to the samples analyzed in accordance with the chain of custody document. Unless otherwise stated, results are reported on a wet weight basis. This analytical report must be reproduced in its entirety.



885 Jarvis Drive  
Morgan Hill, CA 95037  
(408) 776-9600  
FAX (408) 782-6308  
[www.sequoialabs.com](http://www.sequoialabs.com)

URS Corporation [Arco]  
1333 Broadway, Suite 800  
Oakland CA, 94612

Project:ARCO #2035, Albany, CA  
Project Number:G0C26-0005  
Project Manager:Scott Robinson

MOE0064  
Reported:  
05/17/05 14:20

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**  
**Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 5E13005 - EPA 5030B P/T / EPA 8260B</b>										
<b>Laboratory Control Sample (5E13005-BS1)</b>										
Prepared & Analyzed: 05/13/05										
Toluene	9.66	0.50	ug/l	10.0	97	85-120				
Xylenes (total)	29.4	0.50	"	30.0	98	85-125				
Surrogate: 1,2-Dichloroethane-d4	4.89		"	5.00	98	60-135				
<b>Laboratory Control Sample (SE13005-BS2)</b>										
Prepared & Analyzed: 05/13/05										
Benzene	5.07	0.50	ug/l	6.08	83	65-115				
Ethylbenzene	7.69	0.50	"	7.84	98	75-135				
Methyl tert-butyl ether	9.64	0.50	"	9.60	100	65-125				
Toluene	34.1	0.50	"	32.9	104	85-120				
Xylenes (total)	38.8	0.50	"	38.5	101	85-125				
Gasoline Range Organics (C4-C12)	411	50	"	440	93	70-124				
Surrogate: 1,2-Dichloroethane-d4	5.34		"	5.00	107	60-135				
<b>Laboratory Control Sample Dup (SE13005-BSD1)</b>										
Prepared & Analyzed: 05/13/05										
tert-Amyl methyl ether	10.4	0.50	ug/l	10.0	104	80-115	7	15		
Benzene	9.39	0.50	"	10.0	94	65-115	4	20		
tert-Butyl alcohol	50.8	20	"	50.0	102	75-150	2	25		
Di-isopropyl ether	10.2	0.50	"	10.0	102	75-125	3	15		
1,2-Dibromoethane (EDB)	9.96	0.50	"	10.0	100	85-120	12	15		
1,2-Dichloroethane	10.9	0.50	"	10.0	109	85-130	9	20		
Ethanol	193	100	"	200	96	70-135	33	35		
Ethyl tert-butyl ether	10.5	0.50	"	10.0	105	75-130	6	25		
Ethylbenzene	9.99	0.50	"	10.0	100	75-135	5	15		
Methyl tert-butyl ether	10.2	0.50	"	10.0	102	65-125	0	20		
Toluene	9.80	0.50	"	10.0	98	85-120	1	20		
Xylenes (total)	29.4	0.50	"	30.0	98	85-125	0	20		
Surrogate: 1,2-Dichloroethane-d4	5.22		"	5.00	104	60-135				

Sequoia Analytical - Morgan Hill

The results in this report apply to the samples analyzed in accordance with the chain of custody document. Unless otherwise stated, results are reported on a wet weight basis. This analytical report must be reproduced in its entirety.

URS Corporation [Arco]  
 1333 Broadway, Suite 800  
 Oakland CA, 94612

Project:ARCO #2035, Albany, CA  
 Project Number:G0C26-0005  
 Project Manager:Scott Robinson

MOE0064  
 Reported:  
 05/17/05 14:20

### Volatile Organic Compounds by EPA Method 8260B - Quality Control

#### Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

#### Batch 5E13005 - EPA 5030B P/T / EPA 8260B

<b>Matrix Spike (5E13005-MS1)</b>	<b>Source: MOE0219-02</b>	Prepared & Analyzed: 05/13/05								
Ethylbenzene	3860	50	ug/l	784	3000	110	75-135			
Methyl tert-butyl ether	1160	50	"	960	200	100	65-125			
Toluene	7630	50	"	3290	4200	104	85-120			
Xylenes (total)	16200	50	"	3850	12000	109	85-125			
Gasoline Range Organics (C4-C12)	100000	5000	"	44000	62000	86	70-124			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>5.00</i>		<i>"</i>	<i>5.00</i>		<i>100</i>	<i>60-135</i>			
<b>Matrix Spike Dup (5E13005-MSD1)</b>	<b>Source: MOE0219-02</b>	Prepared & Analyzed: 05/13/05								
Ethylbenzene	3730	50	ug/l	784	3000	93	75-135	3	15	
Methyl tert-butyl ether	1060	50	"	960	200	90	65-125	9	20	
Toluene	7510	50	"	3290	4200	101	85-120	2	20	
Xylenes (total)	15900	50	"	3850	12000	101	85-125	2	20	
Gasoline Range Organics (C4-C12)	95600	5000	"	44000	62000	76	70-124	4	20	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>4.55</i>		<i>"</i>	<i>5.00</i>		<i>91</i>	<i>60-135</i>			



885 Jarvis Drive  
Morgan Hill, CA 95037  
(408) 776-9600  
FAX (408) 782-6308  
[www.sequoialabs.com](http://www.sequoialabs.com)

URS Corporation [Arco]  
1333 Broadway, Suite 800  
Oakland CA, 94612

Project:ARCO #2035, Albany, CA  
Project Number:G0C26-0005  
Project Manager:Scott Robinson

MOE0064  
Reported:  
05/17/05 14:20

**Notes and Definitions**

HM	Analyte recovery below established limit
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference



# Chain of Custody Record

Page 1 of 1

Project Name: Analytical for O&M and QMR Sampling  
 BP BU/AR Region/Enfos Segment: BP > Americas > West Coast > Retail > WCBU > CA >  
 Central > 2035 > HistoricalBL

State or Lead Regulatory Agency: California Regional Water Quality Control Board - San Francisco Bay Region  
 Requested Due Date (mm/dd/yy): 10 Day TAT

On-site Time:	12:15	Temp: 70°
Off-site Time:	15:00	Temp: 70°
Sky Conditions:	CLEAR	
Meteorological Events:		
Wind Speed:		Direction:

Lab Name: Sequoia		BP/AR Facility No.: 2035	Consultant/Contractor: URS
Address: 885 Jarvis Drive		BP/AR Facility Address: 1001 San Pablo Ave., Albany, CA 94706	Address: 1333 Broadway, Suite 800
Morgan Hill, CA 95037		Site Lat/Long: 37.886682416/-122.297776	Oakland, CA 94612
Lab PM: Lisa Race		California Global ID No.: T0600100081	Consultant/Contractor Project No.: 38487020
Tele/Fax: 408.782.8156 / 408.782.6308		Enfos Project No.: G0C26-0005	Consultant/Contractor PM: Scott Robinson
BP/AR PM Contact: Paul Supple		Provision or RCOP: Provision	Tele/Fax: 510.874.3280 / 510.874.3268
Address: P.O. Box 6549		Phase/WBS: 03 - Operation and Maintenance	Report Type & QC Level: Level 1 with EDF
Moraga, CA 94570		Sub Phase/Task: 03 - Analytical	E-mail EDD To: Rachel.Lindvall@urscorp.com
Tele/Fax: 925.299.8891 / 925.299.8872		Cost Element: 05 - Subcontracted Costs	Invoice to: Atlantic Richfield Company

Item No.	Sample Description	Time	Date	Soil/Solid	Water/Liquid	Air	Matrix	Laboratory No.	No. of Containers	Preservative				Requested Analysis				Sample Point Lat/Long and Comments	
										Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	Methanol	TBHQ (8260)	MTBE, TAME, ETBE (8260)	DTE, TBA (8260)	SDB, 1,2-DCA (8260)	
1	MW-1	1251	5/20/05	X				01	3		X				X	X	X		MDE0064
2	MW-2	(312)						02	1						X	X	X		
3	MW-3	1435						03							X	X	X		
4	MW-4	(318)						04							X	X	X		
5	RW-1	1358						05							X	X	X		
6	S-5	1422						06	1						X	X	X		
7	TS-05022005-2035	—	—					07	2									on hold	
8																			
9																			
10																			

Sampler's Name: <i>Scott Suno</i>	Relinquished By / Affiliation: <i>AS</i>	Date: <i>5/20/05</i>	Time: <i>12:15</i>	Accepted By/Affiliation: <i>Rachel Lindvall</i>	Date: <i>5/21/05</i>	Time: <i>9:28 am</i>
Sampler's Company: <i>BTS</i>						
Shipment Date:						
Shipment Method:						
Shipment Tracking No:						
Special Instructions:						

Custody Seals In Place Yes  No Temp Blank Yes  No Cooler Temperature on Receipt  °F/C Trip Blank Yes  No

# SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: ARCO 2035  
 REC. BY (PRINT) JL  
 WORKORDER: MDE0064

DATE REC'D AT LAB: 5/3/05  
 TIME REC'D AT LAB: 1300  
 DATE LOGGED IN: 5-3-05

For Regulatory Purposes?  
 DRINKING WATER YES / NO  
 WASTE WATER YES / NO

(For clients requiring preservation checks at receipt, document here ↓)

CIRCLE THE APPROPRIATE RESPONSE	LAB SAMPLE #	DASH #	CLIENT ID	CONTAINER DESCRIPTION	PRESERV ATIVE	pH	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
1. Custody Seal(s) <input checked="" type="radio"/> Present / Absent <input checked="" type="radio"/> Intact / Broken*	01		MW-1	VFA 13	HCl	-	W	5/3/05	
2. Chain-of-Custody <input checked="" type="radio"/> Present / Absent*	02		↓ -2						
3. Traffic Reports or Packing List: <input checked="" type="radio"/> Present / Absent	03		↓ -3						
4. Airbill: <input checked="" type="radio"/> Airbill / Sticker <input checked="" type="radio"/> Present / Absent	04		↓ -4	RW-1					
5. Airbill #:	05			S-5					
6. Sample Labels: <input checked="" type="radio"/> Present / Absent	06								
7. Sample IDs: <input checked="" type="radio"/> Listed / Not Listed on Chain-of-Custody	07								
8. Sample Condition: <input checked="" type="radio"/> Intact / Broken* / Leaking*	08								
9. Does information on chain-of-custody, traffic reports and sample labels agree? <input checked="" type="radio"/> Yes / No*	09								
10. Sample received within hold time? <input checked="" type="radio"/> Yes / No*	10								
11. Adequate sample volume received? <input checked="" type="radio"/> Yes / No*	11								
12. Proper Preservatives used? <input checked="" type="radio"/> Yes / No*	12								
13. Trip Blank / Temp Blank Received? (circle which, if yes) <input checked="" type="radio"/> Yes / No*	13								
14. Temp Rec. at Lab: Is temp 4 +/-2°C? <input checked="" type="radio"/> Yes / No**	14								
(Acceptance range for samples requiring thermal pres.)									
**Exception (if any): METALS / DFF ON ICE or Problem COC									

\*IF CIRCLED, CONTACT PROJECT MANAGER AND ATTACH RECORD OF RESOLUTION.

**ATTACHMENT C**

**HISTORICAL GROUNDWATER DATA TABLES**

**Table 1**  
**Groundwater Monitoring Data**

**ARCO Service Station No. 2035**  
**1001 San Pablo Avenue, Albany, California**

Well Number	TOC (ft-MSL)	Depth to Water (feet)	FP Thickness (feet)	Groundwater Elevation [1] (ft-MSL)	Date Sampled	TPHg ( $\mu\text{g/L}$ )	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethyl- benzene ( $\mu\text{g/L}$ )	Total Xylenes ( $\mu\text{g/L}$ )	MTBE 8021B*	MTBE 8240/8260 ( $\mu\text{g/L}$ )	Dissolved Oxygen (mg/L)	Purged/ Not Purged (P/NP)
MW-1	41.41	6.21	0.00	35.20	03-23-91	8,800	3,600	<50	62	99	--	--	--	--
MW-1	41.41	9.37	0.00	32.04	05-23-91	4,800	2,000	<20	52	<20	--	--	--	--
MW-1	41.41	10.30	0.00	31.11	08-21-91	780	310	<5	12	<5	14	--	--	--
MW-1	41.41	12.25	0.00	29.16	11-08-91	58	14	<0.5	<0.5	<0.5	--	--	--	--
MW-1	41.41	9.06	0.00	32.33	02-26-92	2,700	930	12	18	32	51	--	--	--
MW-1	41.41	9.11	0.00	32.30	04-21-92	2,700	1,000	<10	22	<10	<60	--	--	--
MW-1	41.41	10.37	0.00	31.04	08-14-92	300	52	<0.5	0.9	<0.5	22	--	--	--
MW-1	41.41	8.79	0.00	32.62	12-09-92	270	63	0.7	<0.5	1	25	--	--	--
MW-1	41.41	9.80	0.00	31.61	03-26-93	1,500	610	<5	15	7	56	--	--	--
MW-1	41.41	9.65	0.00	31.76	05-21-93	110	6	<0.5	<0.5	0.7	10	--	--	--
MW-1	41.41	10.22	0.00	31.19	09-03-93	180	40	<0.5	1.2	0.5	26	--	--	--
MW-1	41.41	10.68	0.00	30.73	11-02-93	83	8	<0.5	<0.5	<0.5	13	--	--	--
MW-1	41.41	6.92	0.00	34.49	02-19-94	1,800	540	7	27	31	46	--	--	--
MW-1	41.41	9.28	0.00	32.13	05-17-94	4,500	1,300	20	57	20	<60	--	--	--
MW-1	41.41	10.05	0.00	31.36	08-20-94	530	110	<5	<5	400	--	--	--	--
MW-1	41.41	10.42	0.00	30.99	10-19-94	66	9.1	<0.5	<0.5	8	--	--	--	--
MW-1	41.41	8.10	0.00	33.31	02-15-95	1,200	390	<5	<5	6	45	--	--	--
MW-1	41.41	9.53	0.00	31.88	05-23-95	1,300	600	3	13	3	26	--	--	--
MW-1	41.41	10.03	0.00	31.38	08-23-95	100	21	1.3	<0.5	8	0.55	P	--	--
MW-1	41.41	9.80	0.00	31.61	11-15-95	99	10	0.6	<0.5	<1	2.1	P	--	--
MW-1	41.41	8.82	0.00	32.59	02-01-96	400	93	1.6	3.6	3.7	19	--	1.0	P
DUP 1	--	--	--	--	06-20-96	416	88.4	<250	4.61	1.56	<5.00	--	--	--
MW-1	41.41	9.60	0.00	31.81	06-20-96	444	100	<250	4.15	<250	15.9	--	--	--
MW-1	41.41	9.50	0.00	31.91	11-05-96	73.2	17.8	<0.500	<0.500	<0.500	7.80	--	1.7	P
MW-1	41.41	9.28	0.00	32.13	05-03-97	714	392	<5.00	<5.00	<10.00	26.1	--	1.04	P
MW-1	41.41	10.50	0.00	30.91	10-02-97	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--	--
DUP 1	--	--	--	--	10-02-97	<50	<0.50	<0.50	<0.50	0.52	<5	--	0.59	P

**Table 1**  
**Groundwater Monitoring Data**  
**ARCO Service Station No. 2035**  
**1001 San Pablo Avenue, Albany, California**

Well Number	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (feet)	Groundwater Elevation [1] (ft-MSL)	Date Sampled	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzenes (µg/L)	Total Xylenes (µg/L)	MTBE 8021B* (µg/L)	MTBE 8240/8260 (µg/L)	Dissolved Oxygen (mg/L)	Purged/Not Purged (P/NP)	
MW-2	40.38	6.96	0.00	33.42	03-23-91	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
MW-2	40.38	10.02	0.00	30.36	05-23-91	Not sampled: well sampled semi-annually, during the first and third quarters									
MW-2	40.38	10.87	0.00	29.51	08-21-91	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	--
MW-2	40.38	13.12	0.00	27.26	11-08-91	Not sampled: well sampled semi-annually, during the first and third quarters									
MW-2	40.38	10.25	0.00	30.13	02-26-92	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
MW-2	40.38	9.98	0.00	30.40	04-21-92	Not sampled: well sampled semi-annually, during the first and third quarters									
MW-2	40.38	11.10	0.00	29.28	05-14-92	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
MW-2	40.38	10.00	0.00	30.38	12-09-92	Not sampled: well sampled semi-annually, during the first and third quarters									
MW-2	40.38	10.38	0.00	30.00	03-26-93	<50	<0.5	<0.5	<0.5	<0.5	4	--	--	--	--
MW-2	40.38	10.65	0.00	29.73	05-21-93	Not sampled: well sampled semi-annually, during the first and third quarters									
MW-2	40.38	10.87	0.00	29.51	09-03-93	Not sampled: well sampled semi-annually, during the first and third quarters									
MW-2	40.38	11.25	0.00	29.13	11-02-93	<50	<0.5	<0.5	<0.5	<0.5	19	--	--	--	--
MW-2	40.38	7.69	0.00	32.69	02-19-94	<50	<0.5	<0.5	<0.5	<0.5	18	--	--	--	--
MW-2	40.38	9.88	0.00	30.50	05-17-94	<50	0.5	<0.5	<0.5	<0.5	12	--	--	--	--
MW-2	40.38	10.62	0.00	29.76	08-20-94	<50	<0.5	<0.5	<0.5	<0.5	10	--	--	--	--
MW-2	40.38	11.00	0.00	29.38	10-19-94	<50	<0.5	<0.5	<0.5	<0.5	3	--	--	--	--
MW-2	40.38	9.04	0.00	31.34	02-15-95	<50	<0.5	<0.5	<0.5	<0.5	31	--	--	--	--
MW-2	40.38	9.90	0.00	30.48	05-23-95	<50	<0.5	<0.5	<0.5	<0.5	13	--	--	--	--
MW-2	40.38	10.60	0.00	29.78	08-23-95	<50	0.6	<0.5	<0.5	<0.5	47	--	--	--	--
MW-2	40.38	10.45	0.00	29.93	11-15-95	<50	<0.5	<0.5	<0.5	<0.5	20	--	0.88	P	
MW-2	40.38	9.49	0.00	30.89	02-01-96	<50	<0.5	<0.5	<0.5	<1	<3	--	2.5	P	
MW-2	40.38	10.30	0.00	30.08	06-20-96	<50	<0.5	<0.5	<0.5	<1	59	--	1.0	P	
MW-2	40.38	10.19	0.00	30.19	11-05-96	<50.0	<0.500	<0.500	<0.500	<0.500	4.17	--	1.5	P	
MW-2	40.38	10.15	0.00	30.23	05-03-97	<50.0	<0.500	<0.500	<0.500	<0.500	30.6	--	1.27	P	
DUP	--	--	--	--	05-03-97	<50.0	<0.500	<0.500	<0.500	<0.500	32.7	--	--	--	--
MW-2	40.38	10.97	0.00	29.41	10-02-97	<50	<0.50	<0.50	<0.50	<0.50	1.18	31.5	--	--	--
						<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	0.63	P	

**Table 1**  
**Groundwater Monitoring Data**

**ARCO Service Station No. 2035**  
**1001 San Pablo Avenue, Albany, California**

Well Number	TOC	Depth to Water	PP	Groundwater Elevation [1]	Date Sampled	TPHg ( $\mu\text{g/L}$ )	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethylbenzene ( $\mu\text{g/L}$ )	Total Xylenes ( $\mu\text{g/L}$ )	MTBE 802IB*	MTBE 8240/8260	Dissolved Oxygen ( $\text{mg/L}$ )	Purged/ Not Purged (P/NP)
	Elevation (ft-MSL)	(feet)	Thickness (feet)	(ft-MSL)			( $\mu\text{g/L}$ )	( $\mu\text{g/L}$ )	( $\mu\text{g/L}$ )	( $\mu\text{g/L}$ )	( $\mu\text{g/L}$ )	( $\mu\text{g/L}$ )	( $\text{mg/L}$ )	
MW-3	41.44	7.29	0.00	34.15	03-23-91	51	0.8	<0.5	2.4	<0.5	--	--	--	--
MW-3	41.44	9.53	0.00	31.91	05-23-91	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
MW-3	41.44	11.19	0.00	30.25	08-21-91	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
MW-3	41.44	12.77	0.00	28.67	11-08-91	<50	<0.5	<0.5	<0.5	<0.5	--	79	--	--
MW-3	41.44	9.41	0.00	32.03	02-26-92	120	3.6	<0.5	2.2	3.7	90	--	--	--
MW-3	41.44	9.63	0.00	31.81	04-21-92	<50	<0.5	<0.5	<0.5	<0.5	90	--	--	--
MW-3	41.44	11.12	0.00	30.32	08-14-92	<50	<0.5	<0.5	<0.5	<0.5	54	--	--	--
MW-3	41.44	10.34	0.00	31.10	12-09-92	71	<0.5	<0.5	<0.5	<0.5	130	--	--	--
MW-3	41.44	10.28	0.00	31.16	03-26-93	<100	<1	<1	<1	<1	170	--	--	--
MW-3	41.44	10.40	0.00	31.04	05-21-93	<100	<1	<1	<1	<1	95	--	--	--
MW-3	41.44	10.75	0.00	30.69	09-03-93	<50	<0.5	<0.5	<0.5	<0.5	37	--	--	--
MW-3	41.44	11.44	0.00	30.00	11-02-93	<200	<2	<2	<2	<2	130	--	--	--
MW-3	41.44	7.48	0.00	33.96	02-19-94	<200	<2	<2	<2	<2	140	--	--	--
MW-3	41.44	9.87	0.00	31.57	05-17-94	<100	<1	<1	<1	<1	150	--	--	--
MW-3	41.44	10.72	0.00	30.72	08-20-94	<200	<2	<2	<2	<2	210	--	--	--
MW-3	41.44	11.30	0.00	30.14	10-19-94	<200	<2	<2	<2	<2	270	--	--	--
MW-3	41.44	8.60	0.00	32.84	02-15-95	<500	<2	<2	<2	<2	700	--	--	--
MW-3	41.44	9.87	0.00	31.57	05-23-95	<50	<0.5	<0.5	<0.5	<0.5	150	140	--	--
MW-3	41.44	10.83	0.00	30.61	08-23-95	<50	<0.5	<0.5	<0.5	<0.5	54	71	0.41	P
MW-3	41.44	10.54	0.00	30.90	11-15-95	100	<0.5	3.3	<0.5	<0.5	<1	500	--	6.2
MW-3	41.44	5.69	0.00	35.75	02-01-96	18,000	1,000	45	1,500	940	100	--	2.12	P
MW-3	41.44	9.99	0.00	31.45	06-20-96	90.9	1.52	<0.500	<0.500	<0.500	187	--	2.6	P
MW-3	41.44	10.15	0.00	31.29	11-05-96	138	2.37	<0.500	<0.500	<0.500	216	--	0.47	P
MW-3	41.44	10.17	0.00	31.27	05-03-97	316	15.7	1.14	<0.500	<0.500	178	--	--	P
MW-3	41.44	10.99	0.00	30.45	10-02-97	120	<0.50	<0.50	<0.50	<0.50	120	--	0.47	P

**Table 1**  
**Groundwater Monitoring Data**  
**ARCO Service Station No. 2035**  
**1001 San Pablo Avenue, Albany, California**

Well Number	TOC	Depth to Water	FP Thickness	Groundwater Elevation (I)	Date Sampled	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE 8021B*	MTBE 8240/8260	Dissolved Oxygen	Purged/Not Purged (P/NP)			
	(ft-MSL)	(feet)	(feet)	(ft-MSL)		( $\mu\text{g/L}$ )	( $\mu\text{g/L}$ )	( $\mu\text{g/L}$ )	( $\mu\text{g/L}$ )	( $\mu\text{g/L}$ )	( $\mu\text{g/L}$ )	( $\mu\text{g/L}$ )	(mg/L)				
MW-4	40.33	5.92	0.00	34.41	03-23-91	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--			
MW-4	40.33	9.23	0.00	31.10	05-23-91	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--			
MW-4	40.33	10.61	0.00	29.72	08-21-91	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--			
MW-4	40.33	11.97	0.00	28.36	11-08-91	<50	<0.5	<0.5	<0.5	<0.5	99	--	--	--			
MW-4	40.33	8.84	0.00	31.49	02-26-92	<50	<0.5	<0.5	<0.5	<0.5	--	89	--	--			
MW-4	40.33	9.15	0.00	31.18	04-21-92	<50	0.8	<0.5	<0.5	<0.5	43	--	--	--			
MW-4	40.33	10.35	0.00	29.98	08-14-92	Not sampled: well sampled annually, during the first quarter											
MW-4	40.33	8.70	0.00	31.63	12-09-92	Not sampled: well sampled annually, during the first quarter											
MW-4	40.33	9.73	0.00	30.58	03-26-93	Not sampled: well sampled annually, during the first quarter											
MW-4	40.33	9.91	0.00	30.42	05-21-93	<5,000 <50 <50 <50 <50											
MW-4	40.33	10.25	0.00	30.08	09-03-93	Not sampled: well sampled annually, during the first quarter											
MW-4	40.33	10.79	0.00	29.54	11-02-93	Not sampled: well sampled annually, during the first quarter											
MW-4	40.33	6.78	0.00	33.55	02-19-94	<50	<0.5	<0.5	<0.5	<0.5	4,200	--	--	--	--	--	--
MW-4	40.33	9.26	0.00	31.07	05-17-94	<2,000	<20	<20	<20	<20	3,300	--	--	--	--	--	--
MW-4	40.33	10.10	0.00	30.23	08-20-94	<50	<0.5	<0.5	<0.5	<0.5	43	--	--	--	--	--	--
MW-4	40.33	10.43	0.00	29.90	10-19-94	<50	<0.5	<0.5	<0.5	<0.5	9	--	--	--	--	--	--
MW-4	40.33	8.56	0.00	31.77	02-15-95	<500	<5	<5	<5	<5	17	--	--	--	--	--	--
MW-4	40.33	9.52	0.00	30.81	05-23-95	<50	<0.5	<0.5	<0.5	<0.5	400	--	--	--	--	--	--
MW-4	40.33	9.99	0.00	30.34	08-23-95	<5,000	<5	<5	<5	<5	10	7.6	--	--	--	--	--
MW-4	40.33	9.80	0.00	30.53	11-15-95	<50	<0.5	<0.5	<0.5	<0.5	1,200	1,300	0.84	NP	--	--	--
MW-4	40.33	9.11	0.00	31.22	02-01-96	<50	<0.5	<0.5	<0.5	<1	43	--	0.0	NP	--	--	--
MW-4	40.33	9.60	0.00	30.73	06-20-96	<50.0	<0.500	<0.500	<0.500	<0.500	1,200	--	1.0	NP	--	--	--
MW-4	40.33	9.53	0.00	30.80	11-05-96	<50.0	<0.500	<0.500	<0.500	<0.500	60.5	--	1.3	NP	--	--	--
MW-4	40.33	9.21	0.00	31.12	05-03-97	<50.0	<0.500	<0.500	<0.500	<0.500	14.0	--	0.71	NP	--	--	--
MW-4	40.33	10.74	0.00	29.59	10-03-97	<50	<0.50	<0.50	<0.50	<0.50	83.6	--	0.59	NP	--	--	--
											260	--					

**Table 1**  
**Groundwater Monitoring Data**  
**ARCO Service Station No. 2035**  
**1001 San Pablo Avenue, Albany, California**

Well Number	TOC Elevation (ft-MSL)	Depth to Water (feet)	PP Thickness (feet)	Groundwater Elevation [1] (ft-MSL)	Date Sampled	TPHg ( $\mu\text{g/L}$ )	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethylbenzene ( $\mu\text{g/L}$ )	Total Xylenes ( $\mu\text{g/L}$ )	MTBE 8021B* ( $\mu\text{g/L}$ )	MTBE 8240/8260 ( $\mu\text{g/L}$ )	Dissolved Oxygen (mg/L)	Purged/Not Purged (P/NP)			
MW-S	41.84	6.23	0.00	35.61	03-23-91	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--			
MW-S	41.84	9.61	0.00	32.23	05-23-91	Not sampled: well sampled annually, during the first quarter											
MW-S	41.84	11.12	0.00	30.72	08-21-91	Not sampled: well sampled annually, during the first quarter											
MW-S	41.84	12.52	0.00	29.32	11-08-91	Not sampled: well sampled annually, during the first quarter											
MW-S	41.84	9.52	0.00	32.32	02-26-92	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	
MW-S	41.84	9.44	0.00	32.40	04-21-92	Not sampled: well sampled annually, during the first quarter											
MW-S	41.84	10.83	0.00	31.01	08-14-92	Not sampled: well sampled annually, during the first quarter											
MW-S	41.84	9.20	0.00	32.64	12-09-92	Not sampled: well sampled annually, during the first quarter											
MW-S	41.84	10.10	0.00	31.74	03-26-93	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	
MW-S	41.84	10.28	0.00	31.56	05-21-93	Not sampled: well sampled annually, during the first quarter											
MW-S	41.84	10.73	0.00	31.11	09-03-93	Not sampled: well sampled annually, during the first quarter											
MW-S	41.84	11.23	0.00	30.61	11-02-93	Not sampled: well sampled annually, during the first quarter											
MW-S	41.84	6.67	0.00	35.17	02-19-94	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	
MW-S	41.84	9.61	0.00	32.23	05-17-94	Not sampled: well sampled annually, during the first quarter											
MW-S	41.84	10.58	0.00	31.26	08-20-94	Not sampled: well sampled annually, during the first quarter											
MW-S	41.84	10.56	0.00	31.18	10-19-94	Not sampled: well sampled annually, during the first quarter											
MW-S	41.84	8.35	0.00	33.49	02-15-95	Not sampled: well sampled annually, during the first quarter											
MW-S	41.84	9.95	0.00	31.89	05-23-95	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	
MW-S	41.84	10.51	0.00	31.33	08-23-95	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	
MW-S	41.84	10.37	0.00	31.47	11-15-95	Not sampled: well sampled annually, during the second quarter											
MW-S	41.84	9.35	0.00	32.49	02-01-96	<50	<0.5	<0.5	<0.5	<1	--	--	--	0.79	NP	--	
MW-S	41.84	10.03	0.00	31.81	06-30-96	<50.0	<0.500	<0.500	<0.500	<0.500	<0.50	--	--	1.0	NP	--	
MW-S	41.84	9.89	0.00	31.95	11-05-96	Not sampled: well sampled annually, during the second quarter											
MW-S	41.84	9.42	0.00	32.42	05-03-97	<50.0	<0.500	<0.500	<0.500	<0.500	<0.50	--	--	3.1	NP	--	
MW-S	41.84	10.55	0.00	31.29	10-02-97	Not sampled: well sampled annually, during the second quarter											

**Table 1**  
**Groundwater Monitoring Data**

**ARCO Service Station No. 2035**  
**1001 San Pablo Avenue, Albany, California**

Well Number	TOC	Depth to Water	PP	Groundwater Elevation [1]	Date Sampled	TPHg ( $\mu\text{g/L}$ )	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Biphenyl-benzene ( $\mu\text{g/L}$ )	Total Xylenes ( $\mu\text{g/L}$ )	MTBE	MTBE	Dissolved Oxygen	Purged/Not Purged	
	Elevation (ft-MSL)	(feet)	Thickness (feet)	(ft-MSL)							8021B* ( $\mu\text{g/L}$ )	8240/8260 ( $\mu\text{g/L}$ )	( $\text{mg/L}$ )	(P/NP)	
MW-6	40.13	9.03	0.00	31.10	03-23-91	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
MW-6	40.13	12.45	0.00	27.68	05-23-91	Not sampled: well sampled annually, during the first quarter									
MW-6	40.13	13.32	0.00	26.81	08-21-91	Not sampled: well sampled annually, during the first quarter									
MW-6	40.13	14.13	0.00	26.00	11-08-91	Not sampled: well sampled annually, during the first quarter									
MW-6	40.13	11.86	0.00	28.27	02-26-92	<50	<0.5	<0.5	<0.5	<0.5	43	--	--	--	
MW-6	40.13	12.35	0.00	27.78	04-21-92	Not sampled: well sampled annually, during the first quarter									
MW-6	40.13	13.18	0.00	26.95	08-14-92	Not sampled: well sampled annually, during the first quarter									
MW-6	40.13	11.94	0.00	28.19	12-09-92	Not sampled: well sampled annually, during the first quarter									
MW-6	40.13	13.10	0.00	27.03	03-26-93	<50	<0.5	<0.5	<0.5	<0.5	43	--	--	--	
MW-6	40.13	13.00	0.00	27.13	05-21-93	Not sampled: well sampled annually, during the first quarter									
MW-6	40.13	13.30	0.00	26.83	09-03-93	Not sampled: well sampled annually, during the first quarter									
MW-6	40.13	13.42	0.00	26.71	11-02-93	Not sampled: well sampled annually, during the first quarter									
MW-6	40.13	10.57	0.00	29.56	02-19-94	<50	<0.5	<0.5	<0.5	<0.5	19	--	--	--	
MW-6	40.13	12.64	0.00	27.49	05-17-94	<100	<1	<1	<1	<1	95	--	--	--	
MW-6	40.13	13.13	0.00	27.00	08-20-94	<100	<1	<1	<1	<1	180	--	--	--	
MW-6	40.13	13.48	0.00	26.65	10-19-94	<100	<1	<1	<1	<1	180	--	--	--	
MW-6	40.13	11.92	0.00	28.21	02-15-95	<100	<2	<2	<2	<2	180	--	--	--	
MW-6	40.13	12.80	0.00	27.33	05-23-95	<50	<0.5	<0.5	<0.5	<0.5	200	--	--	--	
MW-6	40.13	13.03	0.00	27.10	08-23-95	<50	<0.5	<0.5	<0.5	<0.5	120	--	--	--	
MW-6	40.13	12.70	0.00	27.43	11-15-95	<50	<0.5	<0.5	<0.5	<0.5	44	--	0.46	NP	
MW-6	40.13	8.61	0.00	31.52	02-01-96	<50	<0.5	<0.5	<0.5	<1	17	17	0.0	NP	
MW-6	40.13	12.88	0.00	27.25	06-20-96	<50	<0.5	<0.5	<0.5	<1	6	--	1.0	NP	
MW-6	40.13	12.74	0.00	27.39	11-05-96	<50.0	<0.500	<0.500	<0.500	<0.500	2.57	--	2.8	NP	
DUP	--	--	--	--	11-05-96	<50.0	<0.500	<0.500	<0.500	<0.500	3.77	--	1.51	NP	
MW-6	40.13	11.29	0.00	28.84	05-03-97	<50.0	<0.500	<0.500	<0.500	<0.500	4.03	--	--	--	
MW-6	40.13	11.35	0.00	28.78	10-02-97	<50	<0.50	<0.50	<0.50	<0.50	10.5	12.3	--	NP	

**Table 1**  
**Groundwater Monitoring Data**  
**ARCO Service Station No. 2035**  
**1001 San Pablo Avenue, Albany, California**

Well Number	TOC Elevation (ft-MSL)	Depth to Water (feet)	PP Thickness (feet)	Groundwater Elevation [1] (ft-MSL)	Date Sampled	TPhg ( $\mu\text{g/L}$ )	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethyl-benzene ( $\mu\text{g/L}$ )	Total Xylenes ( $\mu\text{g/L}$ )	MTBE 8021B*	MTBE 8240/8250 ( $\mu\text{g/L}$ )	Dissolved Oxygen ( $\text{mg/L}$ )	Purged/Not Purged (P/NP)
RW-1	40.33	9.32	0.01	31.02	03-23-91	11,000	560	660	130	1,700	--	--	--	--
RW-1	40.33	9.75	0.03	30.60	05-23-91	Not sampled: well contained floating product				Not sampled: well contained floating product				--
RW-1	40.33	10.86	0.02	29.48	06-21-91	Not sampled: well contained floating product				Not sampled: well contained floating product				--
RW-1	40.33	20.61	0.00	19.72	11-08-91	1,600	79	46	13	240	--	--	--	--
RW-1	40.33	16.56	0.00	23.77	02-26-92	210	44	7.5	2.5	24	29	--	--	--
RW-1	40.33	9.65	0.00	30.68	04-21-92	36,000	7,400	3,700	580	3,400	<100	--	--	--
RW-1	40.33	10.60	0.00	29.73	08-14-92	1,800	31	38	15	150	<10	--	--	--
RW-1	40.33	8.72	0.00	31.61	12-09-92	25,000	1,900	1,000	330	3,200	<100	--	--	--
RW-1	40.33	10.33	0.00	30.00	03-26-93	7,200	1,900	59	95	240	480	--	--	--
RW-1	40.33	10.10	0.00	30.23	05-21-93	3,000	630	84	45	340	<60	--	--	--
RW-1	40.33	10.42	0.00	29.91	09-03-93	7,100	120	55	14	160	<60	--	--	--
RW-1	40.33	9.19	0.00	31.23	11-02-93	<200	14	19	3	19	140	--	--	--
RW-1	40.33	7.49	0.00	32.84	02-19-94	3,800	1,000	85	64	220	950	--	--	--
RW-1	40.33	8.90	0.00	31.43	05-17-94	<200	45	<1	2	4	220	--	--	--
RW-1	40.33	11.06	0.00	29.27	08-20-94	480	200	<2	<2	30	180	--	--	--
RW-1	40.33	11.12	0.00	29.21	10-19-94	110	36	2.9	<0.5	4.1	5	--	--	--
RW-1	40.33	7.70	0.00	32.63	02-16-95	250	61	2	2	19	94	--	--	--
RW-1	40.33	11.12	0.00	29.21	05-23-95	4,500	2,000	7	<1	180	35	--	--	--
RW-1	40.33	10.15	0.00	30.18	08-23-95	2,600	1,100	63	2.3	17	39	--	0.52	NP
RW-1	40.33	9.95	0.00	30.38	11-15-95	1,200	2,600	16	86	41	140	--	1.4	P
RW-1	40.33	11.88	0.00	28.45	02-01-96	11,000	980	230	200	1,400	38	--	1.0	NP
RW-1	40.33	9.83	0.00	30.50	06-20-96	899	278	<250	8.70	8.46	61.1	--	1.3	NP
RW-1	40.33	8.45	0.00	31.88	11-05-96	156,000	3,260	28,800	4,570	25,700	26,200	--	0.63	P
RW-1	40.33	8.57	0.00	31.76	05-03-97	244,000	8,420	56,000	5,660	36,200	23,400	11,000	--	P
RW-1	40.33	9.13	0.00	31.20	10-02-97	128,000	2,500	33,000	3,800	21,900	3,300	--	0.38	P

**Table 1**  
**Groundwater Monitoring Data**

**ARCO Service Station No. 2035**  
**1001 San Pablo Avenue, Albany, California**

Well Number	TOC	Depth to Water	FP Thickness	Groundwater Elevation [1]	Date Sampled	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE 8021B*	MTBE 8240/8260	Dissolved Oxygen	Purged/Not Purged
	(ft-MSL)	(feet)	(feet)	(ft-MSL)		( $\mu\text{g/L}$ )	(mg/L)	(P/NP)						
S-5	--	--	--	--	05-30-97	310,000	3,000	11,000	4,000	34,000	<2,500	--	--	--
S-5	--	10.00	--	--	10-02-97	70,000	1,800	7,800	1,400	20,000	<120	--	0.25	NP

TOC: top of casing

ft-MSL: elevation in feet, relative to mean sea level

TPHg: total petroleum hydrocarbons at gasoline, California DHS LUFT Method

BTEX: benzene, toluene, ethylbenzene, total xylenes by EPA method 8021B. (EPA method 8020 prior to 11/16/99).

MTBE: Methyl tert-butyl ether

$\mu\text{g/L}$ : micrograms per liter

mg/L: milligrams per liter

--: not analyzed or not applicable

<: denotes concentration not present at or above laboratory detection limit stated to the right.

[1] - Computed by adding correction factor to groundwater elevation. Correction factor = free product thickness times 0.73 (approximate specific gravity of gasoline).  
\*: EPA method 8020 prior to 11/16/99

\*\*: For previous historical groundwater elevation and analytical data please refer to *Fourth Quarter 1995 Groundwater Monitoring Program Results and Remediation System Performance Evaluation Report*, ARCO Service Station 2035, Albany, California, (EMCON, March 25, 1996).

DUP: duplicate sample

**Table 3**  
**Historical Groundwater Analytical Data**  
**Petroleum Hydrocarbons and Their Constituents**  
**1994 - Present\***

ARCO Service Station 2035  
 1801 San Pablo Avenue, Albany, California

Date: 07-02-04

Well Description	Water Sample Date	TPH-G LOP Method	Benzene EPA 8020		Toluene EPA 8020		Ethylbenzene EPA 8020		Total Xylenes EPA 8020		MTBE EPA 8020		MTBE EPA 5240		Oil and Grease SM 5220B/F		Oil and Grease SM 5220C		Oil and Grease SM 5220F		TPH EPA 418.1		TPH EPA 418.1	
			µg/L	ng/L	µg/L	ng/L	µg/L	ng/L	µg/L	ng/L	µg/L	ng/L	µg/L	ng/L	µg/L	ng/L	µg/L	ng/L	µg/L	ng/L	µg/L	ng/L	µg/L	ng/L
MW-1	01-31-90	<50	13	<0.5	0.5	<0.5	0.5	0.6	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
MW-1	04-25-90	990	290	3.5	18	1.5	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-1	07-28-90	760	280	<2.5	7.1	<2.5	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-1	11-14-90	570	190	7.3	<2.5	<2.5	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-1	03-23-91	3300	3300	<50	52	<5	99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-1	04-23-91	4800	2800	<50	52	<5	99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-1	08-21-91	780	310	<5	12	<5	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-1	11-08-91	58	14	<5	15	<5	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-1	02-26-92	2700	930	<10	22	<5	51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-1	04-21-92	2700	1000	<10	22	<5	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	01-31-90	<50	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
MW-2	04-25-90	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
MW-2	07-28-90	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
MW-2	11-14-90	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
MW-2	03-23-91	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
MW-2	05-23-91	Not sampled: not scheduled for chemical analysis		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		
MW-2	08-21-91	Not sampled: not scheduled for chemical analysis		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		
MW-2	11-08-91	Not sampled: not scheduled for chemical analysis		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		
MW-2	02-26-92	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
MW-2	04-21-92	Not sampled: not scheduled for chemical analysis		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		
MW-3	01-31-90	<50	1.9	<0.5	2.1	<0.5	2.1	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-3	04-25-90	<50	2.1	<0.5	2.4	<0.5	2.6	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-3	07-28-90	<50	4.5	<0.5	4.5	<0.5	4.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-3	11-14-90	<50	4.5	<0.5	4.5	<0.5	4.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-3	03-23-91	51	0.8	<0.5	2.4	<0.5	4.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-3	05-23-91	<50	4.5	<0.5	4.5	<0.5	4.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-3	08-21-91	<50	3.6	<0.5	4.5	<0.5	4.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-3	11-08-91	<50	2.6	<0.5	2.2	<0.5	3.7	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-3	02-26-92	120	45	<0.5	45	<0.5	45	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-3	04-21-92	<50	45	<0.5	45	<0.5	45	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	01-31-90	<50	48.5	<0.5	49.5	<0.5	49.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	04-25-90	<50	49.5	<0.5	49.5	<0.5	49.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	07-28-90	<50	49.5	<0.5	49.5	<0.5	49.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	11-14-90	220	12	19	0.9	39	39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	03-23-91	<50	0.5	<0.5	4.5	<0.5	4.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	05-23-91	<50	0.5	<0.5	4.5	<0.5	4.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	08-21-91	<50	0.5	<0.5	4.5	<0.5	4.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	11-08-91	<50	0.5	<0.5	4.5	<0.5	4.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	02-26-92	<50	0.3	<0.5	4.5	<0.5	4.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	04-21-92	Not sampled: not scheduled for chemical analysis		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		
MW-5	01-31-90	<50	<0.5	<0.5	40.5	<0.5	40.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	04-25-90	<50	<0.5	<0.5	40.5	<0.5	40.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	07-28-90	<50	<0.5	<0.5	40.5	<0.5	40.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	11-14-90	<50	<0.5	<0.5	40.5	<0.5	40.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**Table 3**  
**Historical Groundwater Analytical Data**  
**Petroleum Hydrocarbons and Their Constituents**  
**1994 - Present\***

ARCO Service Station 2035  
 1001 San Pablo Avenue, Albany, California

Date: 07-02-04

Well Description	Water Sampled	Field Date	TPHg		Benzene		Toluene		Ethylbenzene		Total Xylenes		MTBE		MTBE		CH and Grease		CH and Grease		TRPH		TPHD	
			LUFT Method	µg/L	EPA 4050	µg/L	EPA 4050	µg/L	EPA 4050	µg/L	EPA 4050	µg/L	EPA 4050	µg/L	EPA 4050	µg/L	SM 5320P	µg/L	EPA 4050	µg/L	LUFT Method	µg/L		
MW-5	03-23-91	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	--		
MW-5	05-23-91	Not sampled: not scheduled for chemical analysis																						
MW-5	08-21-91	Not sampled: not scheduled for chemical analysis																						
MW-5	11-08-91	Not sampled: not scheduled for chemical analysis																						
MW-5	02-26-92	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	--		
MW-5	04-21-92	Not sampled: not scheduled for chemical analysis																						
MW-6	01-31-90	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	--		
MW-6	04-25-90	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	--		
MW-6	07-28-90	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	--		
MW-6	11-14-90	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	--		
MW-6	03-23-91	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	--		
MW-6	05-23-91	Not sampled: not scheduled for chemical analysis																						
MW-6	08-21-91	Not sampled: not scheduled for chemical analysis																						
MW-6	11-08-91	Not sampled: not scheduled for chemical analysis																						
MW-6	02-26-92	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	--		
MW-6	04-21-92	Not sampled: not scheduled for chemical analysis																						
RW-1	01-31-90	Not sampled: well connected to the remediation system																						
RW-1	04-25-90	Not sampled: well contained floating product																						
RW-1	07-28-90	Not sampled: well contained floating product																						
RW-1	11-14-90	Not sampled: well contained floating product																						
RW-1	03-23-91	11000	560	660	150	1700	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
RW-1	05-23-91	Not sampled: well contained floating product																						
RW-1	08-21-91	Not sampled: well contained floating product																						
RW-1	11-08-91	1600	79	46	13	240	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
RW-1	02-26-92	210	44	7.5	2.5	24	29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
RW-1	04-21-92	36000	7400	3700	580	3400	<300	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		

TPHg: total petroleum hydrocarbons as gasoline, California DHS LUFT Method

µg/L: micrograms per liter

EPA: United States Environmental Protection Agency

MTBE: Methyl-tert-butyl ether

SM: standard method

TRPH: total recoverable petroleum hydrocarbons

TPHD: total petroleum hydrocarbons as diesel, California DHS LUFT Method

--: not analyzed

\*: for previous historical analytical data please refer to *Fourth Quarter 1992 Groundwater Monitoring Program Results and Remediation System Performance Evaluation Report, ARCO Service Station 2035, Albany, California*, (EMULIN, March 25, 1993).

**ATTACHMENT D**

**JOINT MONITORING DATA**

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**999 San Pablo Avenue**  
**Albany, CA**

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	DO Reading (ppm)
---------	------	----------------	-------------	-------------	-------------	-------------	------------------------	------------------------	----------------	----------------	----------------	---------------	--------------	----------------------------	--------------------------	---------------------------	------------------------

S-1	5/13/1991	1,500	20	2.6	86	74	NA	NA	NA	NA	NA	NA	42.73	8.24	34.49	NA	NA
S-1	8/23/1991	2,900	27	<2.5	75	18	NA	NA	NA	NA	NA	NA	42.73	8.37	34.36	NA	NA
S-1	11/7/1991	2,900	8	2.5	46	26	NA	NA	NA	NA	NA	NA	42.73	8.30	34.43	NA	NA
S-1	1/28/1992	2,000	11	<2.5	60	20	NA	NA	NA	NA	NA	NA	42.73	7.84	34.89	NA	NA
S-1	5/6/1992	1,200	5.5	<2.5	80	36	NA	NA	NA	NA	NA	NA	42.73	7.95	34.78	NA	NA
S-1	8/26/1992	2,000	9.4	<2.5	130	<2.5	NA	NA	NA	NA	NA	NA	42.73	8.24	34.49	NA	NA
S-1	10/28/1992	1,300	27	3.2	72	13	NA	NA	NA	NA	NA	NA	42.73	8.52	34.21	NA	NA
S-1	1/19/1993	1,500	13	3	29	31	NA	NA	NA	NA	NA	NA	42.73	6.54	36.19	NA	NA
S-1	4/29/1993	2,000	15	<2.5	82	<65	NA	NA	NA	NA	NA	NA	42.73	7.93	34.80	NA	NA
S-1	7/22/1993	620	1.1	4.2	3.5	13	NA	NA	NA	NA	NA	NA	42.73	8.09	34.64	NA	NA
S-1	10/21/1993	1,200	34	25	15	9.5	NA	NA	NA	NA	NA	NA	42.73	9.43	33.30	NA	NA
S-1	1/4/1994	860	<2.5	<2.5	5.7	5.3	NA	NA	NA	NA	NA	NA	42.73	8.25	34.48	NA	NA
S-1	4/13/1994	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	42.73	8.02	34.71	NA	NA
S-1	7/25/1994	1,200	8.3	7.4	15	20	NA	NA	NA	NA	NA	NA	42.73	8.22	34.51	NA	NA
S-1	10/10/1994	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	42.73	8.29	34.44	NA	NA
S-1	1/26/1995	1,000	12	0.6	12	420	NA	NA	NA	NA	NA	NA	42.73	6.88	35.85	NA	NA
S-1	4/21/1995	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	42.73	7.65	35.08	NA	NA
S-1	7/28/1995	660	7.2	1	11	8.9	NA	NA	NA	NA	NA	NA	42.73	7.90	34.83	NA	4
S-1	10/31/1995	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	42.73	7.72	35.01	NA	NA
S-1	1/10/1996	1,100	3.5	7	5.1	9.4	NA	NA	NA	NA	NA	NA	42.73	8.24	34.49	NA	7.4
S-1	4/25/1996	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	42.73	7.74	34.99	NA	NA
S-1	7/23/1996	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NA	NA	NA	NA	42.73	7.92	34.81	NA	2.7
S-1	12/10/1996	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	42.73	7.56	35.17	NA	0.6
S-1	2/20/1997	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	NA	NA	NA	NA	42.73	7.95	34.78	NA	3
S-1	5/22/1997	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	42.73	8.11	34.62	NA	0.5
S-1	8/22/1997	810	18	<2.0	5.1	4.4	18	NA	NA	NA	NA	NA	42.73	7.86	34.87	NA	3
S-1	11/3/1997	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	42.73	8.35	34.38	NA	1.1
S-1	2/20/1998	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	NA	NA	NA	NA	42.73	6.09	36.64	NA	2.9

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**999 San Pablo Avenue**  
**Albany, CA**

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	DO Reading (ppm)
S-1	5/18/1998	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	42.73	7.69	35.04	NA	1.1
S-1	8/20/1998	390	6.7	<0.50	0.64	<0.50	14	NA	NA	NA	NA	NA	42.73	8.20	34.53	NA	1.9
S-1	11/6/1998	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	42.73	8.23	34.50	NA	NA
S-1	2/16/1999	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	NA	NA	NA	NA	42.73	7.47	35.26	NA	1.5
S-1	5/28/1999	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	42.73	7.60	35.13	NA	1.3
S-1	8/24/1999	72.4	<0.500	<0.500	<0.500	<0.500	<2.50	NA	NA	NA	NA	NA	42.73	7.95	34.78	NA	1.4
S-1	11/16/1999	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	42.73	7.87	34.86	NA	1.3
S-1	2/2/2000	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	NA	NA	NA	NA	NA	42.73	7.26	35.47	NA	1.4
S-1	5/9/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	42.73	8.13	34.60	NA	1.0
S-1	8/3/2000	209	6.42	<0.500	<0.500	<0.500	<2.50	NA	NA	NA	NA	NA	42.73	8.12	34.61	NA	1.4
S-1	11/15/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	42.73	8.06	34.67	NA	1.0
S-1	2/14/2001	179	4.46	<0.500	<0.500	<0.500	8.72	NA	NA	NA	NA	NA	42.73	8.08	34.65	NA	1.1
S-1	5/31/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	42.73	8.05	34.68	NA	1.0
S-1	8/15/2001	270	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	42.73	8.40	34.33	NA	1.3
S-1	12/31/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	42.73	7.42	35.31	NA	0.4
S-1	2/6/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	42.73	7.60	35.13	NA	2.2
S-1	6/4/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	42.73	8.16	34.57	NA	0.8
S-1	7/25/2002	230	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	42.57	7.84	34.73	NA	0.9
S-1	11/27/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	42.57	8.01	34.56	NA	0.6
S-1	1/30/2003	310	<0.50	<0.50	3.6	1.6	NA	<5.0	NA	NA	NA	NA	42.57	7.56	35.01	NA	1.5
S-1	6/3/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	42.57	7.87	34.70	NA	1.6
S-1	8/8/2003	730	<0.50	<0.50	12	6.4	NA	<0.50	NA	NA	NA	NA	42.57	7.95	34.62	NA	1.3
S-1	11/13/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	42.57	7.90	34.67	NA	0.8
S-1	2/4/2004	220	<0.50	<0.50	1.8	1.1	NA	<0.50	NA	NA	NA	NA	42.57	7.37	35.20	NA	1.2
S-1	5/12/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	42.57	8.05	34.52	NA	1.1
S-1	8/23/2004	110 g	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	42.57	8.10	34.47	NA	0.6
S-1	12/1/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	42.57	7.84	34.73	NA	NA
S-1	2/7/2005	53 h	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	42.57	7.48	35.09	NA	0.49

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**999 San Pablo Avenue**  
**Albany, CA**

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	DO Reading (ppm)	
S-1	5/2/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	42.57	8.05	34.52	NA	NA
S-2	5/13/1991	23,000	3,900	230	1,100	3,200	NA	NA	NA	NA	NA	NA	NA	40.73	8.50	32.23	NA	NA
S-2	8/23/1991	23,000	4,400	260	1,900	2,400	NA	NA	NA	NA	NA	NA	NA	40.73	8.80	31.93	NA	NA
S-2	11/7/1991	40,000	4,000	160	1,020	3,400	NA	NA	NA	NA	NA	NA	NA	40.73	8.61	32.12	NA	NA
S-2	1/28/1992	22,000	1,600	70	420	1,700	NA	NA	NA	NA	NA	NA	NA	40.73	7.80	32.93	NA	NA
S-2	5/6/1992	20,000	2,600	110	860	1,900	NA	NA	NA	NA	NA	NA	NA	40.73	8.10	32.63	NA	NA
S-2	8/26/1992	42,000	5,000	160	1,100	3,500	NA	NA	NA	NA	NA	NA	NA	40.73	8.37	32.36	NA	NA
S-2	10/28/1992	34,000	4,800	330	1,600	2,900	NA	NA	NA	NA	NA	NA	NA	40.73	8.64	32.09	NA	NA
S-2	1/19/1993	20,000	2,300	370	660	1,300	NA	NA	NA	NA	NA	NA	NA	40.73	5.82	34.91	NA	NA
S-2	4/29/1993	40,000	2,000	67	900	1,900	NA	NA	NA	NA	NA	NA	NA	40.73	7.70	33.03	NA	NA
S-2	7/22/1993	22,000	3,000	120	1,000	1,600	NA	NA	NA	NA	NA	NA	NA	40.73	8.38	32.35	NA	NA
S-2 (D)	7/22/1993	17,000	3,000	110	1,000	1,500	NA	NA	NA	NA	NA	NA	NA	40.73	8.38	32.35	NA	NA
S-2	10/21/1993	14,000	2,800	74	870	1,100	NA	NA	NA	NA	NA	NA	NA	40.73	8.58	32.15	NA	NA
S-2 (D)	10/21/1993	13,000	3,200	53	960	820	NA	NA	NA	NA	NA	NA	NA	40.73	8.58	32.15	NA	NA
S-2	1/4/1994	21,000	2,100	67	990	770	NA	NA	NA	NA	NA	NA	NA	40.73	7.70	33.03	NA	NA
S-2 (D)	1/4/1994	22,000	2,000	64	910	750	NA	NA	NA	NA	NA	NA	NA	40.73	7.70	33.03	NA	NA
S-2	4/13/1994	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.73	7.62	33.11	NA	NA
S-2	7/25/1994	43,000	2,600	490	990	1,300	NA	NA	NA	NA	NA	NA	NA	40.73	7.86	32.87	NA	NA
S-2	10/10/1994	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.73	8.12	32.61	NA	NA
S-2	1/26/1995	21,000	790	12	290	570	NA	NA	NA	NA	NA	NA	NA	40.73	6.38	34.35	NA	5.5
S-2	4/21/1995	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.73	7.01	33.72	NA	NA
S-2	7/28/1995	14,000	2,400	360	960	370	NA	NA	NA	NA	NA	NA	NA	40.73	7.82	32.91	NA	4
S-2	10/31/1995	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.73	7.57	33.16	NA	NA
S-2	1/10/1996	17,000	1,400	<50	480	170	NA	NA	NA	NA	NA	NA	NA	40.73	8.13	32.60	NA	7.2
S-2	4/25/1996	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.73	7.72	33.01	NA	NA
S-2	7/23/1996	16,000	2,700	69	1,100	110	9,500	NA	NA	NA	NA	NA	NA	40.73	8.10	32.63	NA	2.2
S-2 (D)	7/23/1996	11,000	2,600	68	1,000	96	10,000	11,000	NA	NA	NA	NA	NA	40.73	8.10	32.63	NA	2.2

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**999 San Pablo Avenue**  
**Albany, CA**

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	DO Reading (ppm)
S-2	12/10/1996	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.73	8.57	32.16	NA	0.5
S-2	2/20/1997	10,000	500	<10	90	130	6,400	NA	NA	NA	NA	NA	40.73	8.15	32.58	NA	4
S-2	5/22/1997	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.73	8.79	31.94	NA	1.1
S-2	8/22/1997	23,000	1,300	65	740	290	4,500	NA	NA	NA	NA	NA	40.73	8.05	32.68	NA	3.2
S-2 (D)	8/22/1997	20,000	1,200	<100	630	250	3,900	NA	NA	NA	NA	NA	40.73	8.05	32.68	NA	3.2
S-2	11/3/1997	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.73	8.75	31.98	NA	1.2
S-2	2/20/1998	450	28	1.3	7.4	12	35	NA	NA	NA	NA	NA	40.73	6.34	34.39	NA	0.4
S-2	5/18/1998	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.73	7.95	32.78	NA	0.8
S-2	8/20/1998	22,000	290	44	420	410	7,300	NA	NA	NA	NA	NA	40.73	7.73	33.00	NA	1.9
S-2	11/6/1998	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.73	8.47	32.26	NA	NA
S-2	2/16/1999	27,000	200	<200	770	840	5,400	NA	NA	NA	NA	NA	40.73	7.24	33.49	NA	1.4
S-2	5/28/1999	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.73	7.82	32.91	NA	1.3
S-2	8/24/1999	13,400	196	<25.0	439	113	597	NA	NA	NA	NA	NA	40.73	8.61	32.12	NA	1.2
S-2	11/16/1999	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.73	8.17	32.56	NA	1.1
S-2	2/2/2000	7,850	176	88.0	134	111	540	NA	NA	NA	NA	NA	40.73	7.57	33.16	NA	1.2
S-2	5/9/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.73	7.94	32.79	NA	1.3
S-2	8/3/2000	35,000	255	122	842	224	905	726e	NA	NA	NA	NA	40.73	8.07	32.66	NA	1.1
S-2	11/15/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.73	8.13	32.60	NA	1.3
S-2	2/14/2001	13,000	147	<25.0	309	54.4	581	NA	NA	NA	NA	NA	40.73	6.39	34.34	NA	1.4
S-2	5/31/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.73	7.21	33.52	NA	1.5
S-2	8/15/2001	15,000	67	4.1	220	33	NA	440	NA	NA	NA	NA	40.73	8.27	32.46	NA	0.6
S-2	12/31/2001	NA	NA	NA	NA	NA	NA	270	NA	NA	NA	NA	40.73	6.07	34.66	NA	0.2
S-2	2/6/2002	15,000	53	2.8	120	31	NA	220	NA	NA	NA	NA	40.73	7.98	32.75	NA	1.8
S-2	6/4/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.73	6.70	34.03	NA	0.2
S-2	7/25/2002	9,000	75	4.0	180	24	NA	460	NA	NA	NA	NA	40.63	7.67	32.96	NA	0.9
S-2	11/27/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.63	7.84	32.79	NA	0.7
S-2	1/30/2003	15,000	26	<2.5	92	22	NA	210	NA	NA	NA	NA	40.63	7.29	33.34	NA	15.6
S-2	6/3/2003	17,000	<25	<25	130	<50	NA	290	NA	NA	NA	NA	40.63	7.87	32.76	NA	5.4

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**999 San Pablo Avenue**  
**Albany, CA**

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	DO Reading (ppm)
---------	------	----------------	-------------	-------------	-------------	-------------	------------------------	------------------------	----------------	----------------	----------------	---------------	--------------	----------------------------	--------------------------	---------------------------	------------------------

S-2	8/8/2003	4,500	<2.5	<2.5	9.4	<5.0	NA	140	NA	NA	NA	NA	40.63	8.18	32.45	NA	16.2
S-2	11/13/2003	10,000	18	<10	47	21	NA	180	NA	NA	NA	NA	40.63	7.98	32.65	NA	19.5
S-2	2/4/2004	5,700	54	<10	54	<20	NA	270	NA	NA	NA	NA	40.63	7.21	33.42	NA	>15
S-2	5/12/2004	8,200	18	<10	<10	<20	NA	250	NA	NA	NA	NA	40.63	8.07	32.56	NA	3.1
S-2	8/23/2004	4,100	<10	<10	<10	<20	NA	84	<40	<40	<40	<100	40.63	8.52	32.11	NA	10.7
S-2	12/1/2004	2,000	3.4	<2.5	6.2	<5.0	NA	77	NA	NA	NA	NA	40.63	8.70	31.93	NA	11.8
S-2	2/7/2005	7,400	32	1.6	29	3.1	NA	210	NA	NA	NA	NA	40.63	7.58	33.05	NA	0.11
S-2	5/2/2005	8,100	84	4.9	83	5.5	NA	320	NA	NA	NA	NA	40.63	7.45	33.18	NA	0.6

S-3	5/13/1991	3,300	30	3.6	26	13	NA	NA	NA	NA	NA	NA	41.46	7.90	33.56	NA	NA
S-3	8/23/1991	2,000	25	4	9.3	4.5	NA	NA	NA	NA	NA	NA	41.46	8.14	33.32	NA	NA
S-3	11/7/1991	4,000	20	3.9	5	4.9	NA	NA	NA	NA	NA	NA	41.46	7.91	33.55	NA	NA
S-3	1/28/1992	2,100	21	7.6	6.7	15	NA	NA	NA	NA	NA	NA	41.46	7.53	33.93	NA	NA
S-3 (D)	1/28/1992	2,100	18	6.1	7.1	14	NA	NA	NA	NA	NA	NA	41.46	7.53	33.93	NA	NA
S-3	5/6/1992	6,600	38	51	45	65	NA	NA	NA	NA	NA	NA	41.46	7.55	33.91	NA	NA
S-3	8/26/1992	5,800	18	12	29	60	NA	NA	NA	NA	NA	NA	41.46	7.53	33.93	NA	NA
S-3	10/28/1992	3,000	55	11	16	32	NA	NA	NA	NA	NA	NA	41.46	7.95	33.51	NA	NA
S-3	1/19/1993	3,100	<5	5.1	11	16	NA	NA	NA	NA	NA	NA	41.46	6.12	35.34	NA	NA
S-3	4/29/1993	3,000	31	22	<5	14	NA	NA	NA	NA	NA	NA	41.46	7.27	34.19	NA	NA
S-3	7/22/1993	2,600	3.1	43	23	53	NA	NA	NA	NA	NA	NA	41.46	7.62	33.84	NA	NA
S-3	10/21/1993	2,500	73	14	16	32	NA	NA	NA	NA	NA	NA	41.46	7.81	33.65	NA	NA
S-3	1/4/1994	4,800	13	21	<12.5	33	NA	NA	NA	NA	NA	NA	41.46	7.49	33.97	NA	NA
S-3	4/13/1994	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.46	7.32	34.14	NA	NA
S-3	7/25/1994	2,600	6.1	4	3.8	12	NA	NA	NA	NA	NA	NA	41.46	7.66	33.80	NA	NA
S-3	10/10/1994	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.46	7.49	33.97	NA	NA
S-3	1/26/1995	3,600	30	6.8	5.6	19	NA	NA	NA	NA	NA	NA	41.46	6.50	34.96	NA	NA
S-3 (D)	1/26/1995	2,200	9.9	15	14	22	NA	NA	NA	NA	NA	NA	41.46	6.50	34.96	NA	NA
S-3	4/21/1995	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.46	6.79	34.67	NA	NA

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**999 San Pablo Avenue**  
**Albany, CA**

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	DO Reading (ppm)
S-3	7/28/1995	3,700	27	9.3	20	34	NA	NA	NA	NA	NA	NA	41.46	7.28	34.18	NA	4
S-3	10/31/1995	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.46	6.74	34.72	NA	NA
S-3	1/10/1996	4,000	10	<0.5	13	28	NA	NA	NA	NA	NA	NA	41.46	7.48	33.98	NA	6.1
S-3	4/25/1996	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.46	6.90	34.56	NA	NA
S-3	7/23/1996	2,100	20	<0.5	<0.5	<0.5	<25	NA	NA	NA	NA	NA	41.46	7.04	34.42	NA	2.1
S-3	12/10/1996	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.46	7.96	33.50	NA	0.7
S-3	2/20/1997	3,500	83	<5.0	18	16	130	NA	NA	NA	NA	NA	41.46	7.44	34.02	NA	3
S-3 (D)	2/20/1997	3,000	69	<5.0	14	12	70	NA	NA	NA	NA	NA	41.46	7.44	34.02	NA	3
S-3	5/22/1997	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.46	7.13	34.33	NA	0.6
S-3	8/22/1997	4,700	60	12	19	21	40	NA	NA	NA	NA	NA	41.46	6.81	34.65	NA	2.9
S-3	11/3/1997	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.46	7.40	34.06	NA	0.9
S-3	2/20/1998	3,400	<10	<10	14	18	85	NA	NA	NA	NA	NA	41.46	6.55	34.91	NA	0.8
S-3 (D)	2/20/1998	3,100	8.6	7.8	12	16	57	NA	NA	NA	NA	NA	41.46	6.55	34.91	NA	0.8
S-3	5/18/1998	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.46	6.81	34.65	NA	0.7
S-3	8/20/1998	4,400	67	23	9.8	22	240	NA	NA	NA	NA	NA	41.46	6.98	34.48	NA	2.2
S-3	11/6/1998	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.46	6.96	34.50	NA	NA
S-3	2/16/1999	2,000	6.9	6.2	3.7	4.8	47	NA	NA	NA	NA	NA	41.46	6.93	34.53	NA	2.0
S-3	5/28/1999	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.46	6.74	34.72	NA	1.8
S-3	8/24/1999	4,170	54.8	14.2	6.65	13.7	43.4	NA	NA	NA	NA	NA	41.46	9.05	32.41	NA	1.9
S-3	11/16/1999	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.46	7.09	34.37	NA	1.6
S-3	2/2/2000	2,410	133	112	24.9	104	46.0	NA	NA	NA	NA	NA	41.46	6.59	34.87	NA	1.9
S-3	5/9/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.46	7.13	34.33	NA	1.9
S-3	8/3/2000	3,890	17.2	21.9	<10.0	<10.0	166	NA	NA	NA	NA	NA	41.46	6.82	34.64	NA	1.8
S-3	11/15/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.46	6.98	34.48	NA	1.6
S-3	2/14/2001	2,800	35.8	5.57	3.83	2.94	1,070	1,250	NA	NA	NA	NA	41.46	6.57	34.89	NA	1.1
S-3	5/31/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.46	6.72	34.74	NA	1.6
S-3	8/15/2001	2,700	2.0	0.52	<0.50	2.0	NA	140	NA	NA	NA	NA	41.46	7.44	34.02	NA	0.6
S-3	12/31/2001	2,300	<2.0	<2.0	<2.0	<2.0	NA	470	NA	NA	NA	NA	41.46	6.62	34.84	NA	0.6

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**999 San Pablo Avenue**  
**Albany, CA**

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	DO Reading (ppm)
---------	------	----------------	-------------	-------------	-------------	-------------	------------------------	------------------------	----------------	----------------	----------------	---------------	--------------	----------------------------	--------------------------	---------------------------	------------------------

S-3	2/6/2002	2,000	2.6	1.6	4.3	7.8	NA	170	NA	NA	NA	NA	41.46	7.22	34.24	NA	2.2
S-3	6/4/2002	2,400	1.0	1.1	0.54	4.5	NA	120	NA	NA	NA	NA	41.46	7.34	34.12	NA	0.5
S-3	7/25/2002	3,100	0.86	<0.50	<0.50	2.0	NA	92	NA	NA	NA	NA	41.37	6.98	34.39	NA	1.0
S-3	11/27/2002	2,600	2.0	0.55	<0.50	2.1	NA	44	NA	NA	NA	NA	41.37	7.62	33.75	NA	0.7
S-3	1/30/2003	1,200	2.1	1.3	1.6	3.4	NA	42	NA	NA	NA	NA	41.37	7.14	34.23	NA	13.6
S-3	6/3/2003	2,700	2.9	<0.50	0.50	2.8	NA	43	NA	NA	NA	NA	41.37	7.25	34.12	NA	1.7
S-3	8/8/2003	1,400	2.4	0.71	<0.50	2.2	NA	32	NA	NA	NA	NA	41.37	7.67	33.70	NA	>20
S-3	11/13/2003	5,200	5.1	2.4	<1.0	5.6	NA	69	NA	NA	NA	NA	41.37	7.56	33.81	NA	19.6
S-3	2/4/2004	2,800	1.9	<1.0	1.0	2.6	NA	20	NA	NA	NA	NA	41.37	7.12	34.25	NA	>15
S-3	5/12/2004	1,900	2.8	<1.0	<1.0	2.2	NA	9.7	NA	NA	NA	NA	41.37	7.94	33.43	NA	4.0
S-3	8/23/2004	1,400	7.6	1.1	<1.0	2.9	NA	13	<4.0	<4.0	<4.0	<10	41.37	8.09	33.28	NA	13.3
S-3	12/1/2004	950	1.9	<1.0	<1.0	<2.0	NA	5.6	NA	NA	NA	NA	41.37	8.21	33.16	NA	13.0
S-3	2/7/2005	1,800	1.4	<1.0	<1.0	2.1	NA	9.9	NA	NA	NA	NA	41.37	7.69	33.68	NA	0.25
S-3	5/2/2005	4,000	2.3	1.1	1.6	3.0	NA	9.9	NA	NA	NA	NA	41.37	7.20	34.17	NA	0.5

S-4	5/13/1991	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	41.10	7.44	33.66	NA	NA
S-4	8/23/1991	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	41.10	8.32	32.78	NA	NA
S-4	11/7/1991	260	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	41.10	8.32	32.78	NA	NA
S-4	1/28/1992	110c	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	41.10	7.40	33.70	NA	NA
S-4	5/6/1992	54	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	41.10	7.21	33.89	NA	NA
S-4	8/26/1992	67	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	41.10	8.13	32.97	NA	NA
S-4	10/28/1992	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	41.10	8.73	32.37	NA	NA
S-4	1/19/1993	86	1.2	0.7	2.7	15	NA	NA	NA	NA	NA	NA	41.10	5.86	35.24	NA	NA
S-4	4/29/1993	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	41.10	7.02	34.08	NA	NA
S-4 (D)	4/29/1993	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	41.10	7.02	34.08	NA	NA
S-4	7/22/1993	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	41.10	7.76	33.34	NA	NA
S-4	10/21/1993	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	41.10	8.53	32.57	NA	NA
S-4	1/4/1994	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	41.10	7.92	33.18	NA	NA

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**999 San Pablo Avenue**  
**Albany, CA**

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	DO Reading (ppm)
S-4	4/13/1994	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.10	7.71	33.39	NA	NA
S-4	7/25/1994	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.10	7.82	33.28	NA	NA
S-4	10/10/1994	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.10	8.15	32.95	NA	NA
S-4	1/26/1995	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	41.10	5.73	35.37	NA	NA
S-4	4/21/1995	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.10	6.26	34.84	NA	NA
S-4	7/28/1995	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.10	7.80	33.30	NA	NA
S-4	10/31/1995	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.10	8.45	32.65	NA	NA
S-4	1/10/1996	<50	1	2.8	<0.5	2.1	NA	NA	NA	NA	NA	NA	41.10	8.26	32.84	NA	2.8
S-4	4/25/1996	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.10	7.14	33.96	NA	NA
S-4	7/23/1996	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NA	NA	NA	NA	41.10	8.18	32.92	NA	3.8
S-4	12/10/1996	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.10	7.04	34.06	NA	3.9
S-4	2/20/1997	<50	<0.50	<0.50	<0.50	<0.50	6.7	NA	NA	NA	NA	NA	41.10	7.07	34.03	NA	5
S-4	5/22/1997	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.10	6.63	34.47	NA	0.8
S-4	8/22/1997	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.10	7.69	33.41	NA	3.7
S-4	11/3/1997	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.10	8.26	32.84	NA	1.3
S-4	2/20/1998	130	6.9	4.6	5.2	17	2.8	NA	NA	NA	NA	NA	41.10	5.57	35.53	NA	1.8
S-4	5/18/1998	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.10	7.13	33.97	NA	1.4
S-4	8/20/1998	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.10	7.77	33.33	NA	4.0
S-4	11/6/1998	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.10	7.85	33.25	NA	NA
S-4	2/16/1999	<50	<0.50	<0.50	<0.50	<0.50	23	NA	NA	NA	NA	NA	41.10	6.51	34.59	NA	3.6
S-4	5/28/1999	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.10	7.00	34.10	NA	3.2
S-4	8/24/1999	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.10	9.13	31.97	NA	1.9
S-4	11/16/1999	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.10	7.79	33.31	NA	1.7
S-4	2/2/2000	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	NA	NA	NA	NA	NA	41.10	7.19	33.91	NA	1.9
S-4	5/9/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.10	7.51	33.59	NA	1.8
S-4	8/3/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.10	7.83	33.27	NA	1.9
S-4	11/15/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.10	7.69	33.41	NA	1.5
S-4	2/14/2001	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	NA	NA	NA	NA	41.10	6.20	34.90	NA	1.6

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**999 San Pablo Avenue**  
**Albany, CA**

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	DO Reading (ppm)
---------	------	----------------	-------------	-------------	-------------	-------------	------------------------	------------------------	----------------	----------------	----------------	---------------	--------------	----------------------------	--------------------------	---------------------------	------------------------

S-4	5/31/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.10	6.56	34.54	NA	1.6
S-4	8/15/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.10	7.90	33.20	NA	0.6
S-4	12/31/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.10	5.62	35.48	NA	2.7
S-4	2/6/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	NA	41.10	7.29	33.81	NA	0.2
S-4	6/4/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.10	7.45	33.65	NA	0.6
S-4	7/25/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.04	7.39	33.65	NA	0.8
S-4	11/27/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.04	7.60	33.44	NA	NA
S-4	1/30/2003	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	NA	41.04	8.45	32.59	NA	NA
S-4	6/3/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.04	6.82	34.22	NA	NA
S-4	8/8/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.04	7.36	33.68	NA	NA
S-4	11/13/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.04	7.56	33.48	NA	NA
S-4	2/4/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	NA	41.04	6.47	34.57	NA	NA
S-4	5/12/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.04	7.10	33.94	NA	NA
S-4	8/23/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.04	7.60	33.44	NA	NA
S-4	12/1/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.04	7.23	33.81	NA	NA
S-4	2/7/2005	<50	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	NA	41.04	6.12	34.92	NA	NA
S-4	5/2/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.04	6.50	34.54	NA	NA

S-5	5/13/1991	NA	39.99	14.60	30.57	6.48	NA											
S-5	8/23/1991	NA	39.99	15.14	29.25	5.50	NA											
S-5	11/7/1991	NA	39.99	15.10	29.17	5.35	NA											
S-5	1/28/1992	NA	39.99	14.05	29.86	4.90	NA											
S-5	5/6/1992	NA	39.99	14.31	30.21	5.66	NA											
S-5	8/26/1992	NA	39.99	14.26	28.77	3.80	NA											
S-5	10/28/1992	NA	39.99	14.22	28.82	3.81	NA											
S-5	1/19/1993	NA	39.99	12.36	30.80	3.96	NA											
S-5	4/29/1993	NA	39.99	9.64	31.07	0.90	NA											
S-5	7/22/1993	NA	39.99	9.55	31.16	0.90	NA											

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**999 San Pablo Avenue**  
**Albany, CA**

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	DO Reading (ppm)
---------	------	----------------	-------------	-------------	-------------	-------------	------------------------	------------------------	----------------	----------------	----------------	---------------	--------------	----------------------------	--------------------------	---------------------------	------------------------

S-5	10/21/1993	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39.99	11.23	29.34	0.73	NA
S-5	1/4/1994	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39.99	11.69	29.82	1.90	NA
S-5	4/13/1994	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39.99	11.42	29.87	1.62	NA
S-5	7/25/1994	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39.99	12.01	29.41	1.79	NA
S-5	10/10/1994	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39.99	12.05	29.38	1.80	NA
S-5	1/26/1995	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39.99	8.42	32.95	1.72	NA
S-5	4/21/1995	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39.99	10.03	30.90	1.17	NA
S-5	7/28/1995	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39.99	11.42	30.07	1.87	NA
S-5	10/31/1995	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39.99	13.21	27.21	0.54	NA
S-5	1/10/1996	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39.99	12.05	28.04	0.13	NA
S-5	4/25/1996	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39.99	9.68	30.33	0.03	NA
S-5	7/23/1996	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39.99	9.82	30.20	0.04	NA
S-5	12/10/1996	270,000	8,800	29,000	5,200	37,000	<2,500	NA	NA	NA	NA	NA	39.99	9.10	30.91	0.03	NA
S-5 (D)	12/10/1996	400,000	9,200	32,000	7,200	50,000	<2,500	NA	NA	NA	NA	NA	39.99	9.10	30.91	0.03	NA
S-5	2/20/1997	88,000	2,000	11,000	1,600	19,000	<500	NA	NA	NA	NA	NA	39.99	8.93	31.06	NA	5
S-5	5/22/1997	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39.99	10.07	29.94	0.02	NA
S-5	8/22/1997	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39.99	10.24	29.77	0.02	NA
S-5	11/3/1997	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39.99	10.91	29.10	0.02	NA
S-5	2/20/1998	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39.99	7.81	32.20	0.03	NA
S-5	5/18/1998	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39.99	9.64	30.37	0.02	NA
S-5	5/31/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39.99	10.13	29.86	NA	NA

S-6	5/13/1991	13,000	600	140	210	310	NA	NA	NA	NA	NA	NA	40.12	7.82	32.30	NA	NA
S-6	8/23/1991	9,800	480	80	120	150	NA	NA	NA	NA	NA	NA	40.12	9.58	30.54	NA	NA
S-6	11/7/1991	6,200	240	23	25	27	NA	NA	NA	NA	NA	NA	40.12	10.86	29.26	NA	NA
S-6	1/28/1992	5,600	250	15	41	36	NA	NA	NA	NA	NA	NA	40.12	8.97	31.15	NA	NA
S-6	5/6/1992	7,100	330	29	110	210	NA	NA	NA	NA	NA	NA	40.12	8.27	31.85	NA	NA
S-6	8/26/1992	13,000	240	<50	56	780	NA	NA	NA	NA	NA	NA	40.12	9.57	31.55	NA	NA

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**999 San Pablo Avenue**  
**Albany, CA**

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	DO Reading (ppm)
S-6	10/28/1992	10,000	470	210	67	170	NA	NA	NA	NA	NA	NA	40.12	8.90	32.22	NA	NA
S-6	1/19/1993	4,800	100	26	27	45	NA	NA	NA	NA	NA	NA	40.12	4.84	35.28	NA	NA
S-6	4/29/1993	7,000	430	20	<12.5	42	NA	NA	NA	NA	NA	NA	40.12	5.61	34.51	NA	NA
S-6	7/22/1993	5,800	260	120	65	150	NA	NA	NA	NA	NA	NA	40.12	6.56	33.56	NA	NA
S-6	10/21/1993	5,500	270	69	120	140	NA	NA	NA	NA	NA	NA	40.12	8.73	31.39	NA	NA
S-6	1/4/1994	7,100	180	58	63	62	NA	NA	NA	NA	NA	NA	40.12	7.14	32.98	NA	NA
S-6	4/13/1994	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.12	7.21	32.91	NA	NA
S-6	7/25/1994	12,000	190	52	30	39	NA	NA	NA	NA	NA	NA	40.12	6.85	33.27	NA	NA
S-6 (D)	7/25/1994	7,200	170	32	31	34	NA	NA	NA	NA	NA	NA	40.12	6.85	33.27	NA	NA
S-6	10/10/1994	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.12	6.20	33.92	NA	NA
S-6	1/26/1995	5,800	120	23	24	44	NA	NA	NA	NA	NA	NA	40.12	4.89	35.23	NA	NA
S-6	4/21/1995	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.12	5.61	34.51	NA	NA
S-6	7/28/1995	4,400	210	23	34	60	NA	NA	NA	NA	NA	NA	40.12	5.30	34.82	NA	3
S-6 (D)	7/28/1995	6,100	230	20	38	59	NA	NA	NA	NA	NA	NA	40.12	5.30	34.82	NA	3
S-6	10/31/1995	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.12	4.98	35.14	NA	NA
S-6	1/10/1996	6,800	170	87	35	105	NA	NA	NA	NA	NA	NA	40.12	5.67	34.45	NA	2.2
S-6 (D)	1/10/1996	7,800	230	120	50	210	NA	NA	NA	NA	NA	NA	40.12	5.67	34.45	NA	2.2
S-6	4/25/1996	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.12	5.23	34.89	NA	NA
S-6	7/23/1996	2,600	170	<0.5	<0.5	8.5	<25	NA	NA	NA	NA	NA	40.12	5.40	34.72	NA	1.4
S-6	12/10/1996	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.12	6.68	33.44	NA	0.7
S-6	2/20/1997	6,300	160	7.7	14	31	77	NA	NA	NA	NA	NA	40.12	5.70	34.42	NA	2
S-6	5/22/1997	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.12	5.49	34.63	NA	0.9
S-6	8/22/1997	6,200	160	26	15	27	49	NA	NA	NA	NA	NA	40.12	5.71	34.41	NA	2.8
S-6	11/3/1997	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.12	6.15	33.97	NA	1.4
S-6	2/20/1998	4,100	150	<10	<10	15	55	NA	NA	NA	NA	NA	40.12	5.25	34.87	NA	0.4
S-6	5/18/1998	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.12	5.69	34.43	NA	0.4
S-6	8/20/1998	7,800	240	38	16	39	110	NA	NA	NA	NA	NA	40.12	6.04	34.08	NA	1.5
S-6 (D) b	8/20/1998	8,400	270	30	19	31	130	NA	NA	NA	NA	NA	40.12	6.04	34.08	NA	1.5

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**999 San Pablo Avenue**  
**Albany, CA**

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	DO Reading (ppm)
S-6	11/6/1998	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.12	6.10	34.02	NA	NA
S-6	2/16/1999	6,000	190	19	14	20	<2.5	NA	NA	NA	NA	NA	40.12	5.84	34.28	NA	1.7
S-6	5/28/1999	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.12	9.51	30.61	NA	1.9
S-6	8/24/1999	6,870	193	32.1	18.8	36.4	<25.0	NA	NA	NA	NA	NA	40.12	8.29	31.83	NA	2.7
S-6	11/16/1999	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.12	5.93	34.19	NA	2.6
S-6	2/2/2000	2,310	164	122	28.6	133	63.1	NA	NA	NA	NA	NA	40.12	5.33	34.79	NA	2.6
S-6	5/9/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.12	6.41	33.71	NA	2.4
S-6	8/3/2000	5,600	188	27.4	<10.0	25.2	174	NA	NA	NA	NA	NA	40.12	5.84	34.28	NA	2.7
S-6	11/15/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.12	5.58	34.54	NA	2.3
S-6	2/14/2001	6,140	126	13.2	8.01	18.0	205	NA	NA	NA	NA	NA	40.12	5.50	34.62	NA	1.3
S-6	5/31/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.12	5.52	34.60	NA	1.2
S-6	8/15/2001	6,000	160	9.1	5.8	24	NA	51	NA	NA	NA	NA	40.12	6.04	34.08	NA	0.4
S-6	12/31/2001	6,900	120	12	6.6	24	NA	44	NA	NA	NA	NA	40.12	5.52	34.60	NA	0.4
S-6	2/6/2002	4,300	110	7.3	4.8	18	NA	39	NA	NA	NA	NA	40.12	6.34	33.78	NA	0.5
S-6	6/4/2002	4,300	140	8.4	4.9	22	NA	26	NA	NA	NA	NA	40.12	6.19	33.93	NA	0.4
S-6	7/25/2002	3,900	140	9.0	5.5	23	NA	31	NA	NA	NA	NA	39.92	6.05	33.87	NA	0.7
S-6	11/27/2002	5,200	160	9.6	4.9	24	NA	26	NA	NA	NA	NA	39.92	6.26	33.66	NA	NA
S-6	1/30/2003	4,700	200	9.6	5.5	25	NA	30	NA	NA	NA	NA	39.92	5.73	34.19	NA	NA
S-6	6/3/2003	3,900	160	10	<10	25	NA	30	NA	NA	NA	NA	39.92	5.52	34.40	NA	NA
S-6	8/8/2003	2,900	150	8.8	3.6	18	NA	18	NA	NA	NA	NA	39.92	6.14	33.78	NA	NA
S-6	11/13/2003	8,300	220	19	11	35	NA	28	NA	NA	NA	NA	39.92	5.85	34.07	NA	NA
S-6	2/4/2004	7,400	310	17	10	31	NA	30	NA	NA	NA	NA	39.92	5.51	34.41	NA	NA
S-6	5/12/2004	4,000	230	10	5.5	24	NA	21	NA	NA	NA	NA	39.92	6.10	33.82	NA	NA
S-6	8/23/2004	6,000	260	16	9.0	32	NA	19	NA	NA	NA	NA	39.92	6.38	33.54	NA	NA
S-6	12/1/2004	9,600	280	23	11	47	NA	24	NA	NA	NA	NA	39.92	6.41	33.51	NA	NA
S-6	2/7/2005	7,100	300	14	8.4	35	NA	21	NA	NA	NA	NA	39.92	5.94	33.98	NA	NA
S-6	5/2/2005	6,100	250	12	8.1	30	NA	16	NA	NA	NA	NA	39.92	5.90	34.02	NA	NA

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**999 San Pablo Avenue**  
**Albany, CA**

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	DO Reading (ppm)
S-7	5/13/1991	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	40.10	10.56	29.54	NA	NA
S-7	8/23/1991	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	40.10	11.16	28.94	NA	NA
S-7	11/7/1991	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	40.10	11.48	28.62	NA	NA
S-7	1/28/1992	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	40.10	10.72	29.38	NA	NA
S-7	5/6/1992	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	40.10	10.34	29.76	NA	NA
S-7	8/26/1992	160	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	40.10	11.13	28.97	NA	NA
S-7	10/28/1992	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	40.10	11.52	28.58	NA	NA
S-7	1/19/1993	50	1.1	0.6	1.9	9.2	NA	NA	NA	NA	NA	NA	40.10	8.68	31.42	NA	NA
S-7	4/29/1993	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	40.10	9.90	30.20	NA	NA
S-7	7/22/1993	Well inaccessible	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.10	NA	NA	NA	NA
S-7	10/21/1993	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	40.10	11.10	29.00	NA	NA
S-7	1/4/1994	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	40.10	10.40	29.70	NA	NA
S-7	4/13/1994	<50	1.4	0.61	<0.5	0.64	NA	NA	NA	NA	NA	NA	40.10	10.20	29.90	NA	NA
S-7 (D)	4/13/1994	<50	1.4	0.61	<0.5	0.66	NA	NA	NA	NA	NA	NA	40.10	10.20	29.90	NA	NA
S-7	7/25/1994	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	40.10	10.48	29.62	NA	NA
S-7 a	10/10/1994	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	40.10	10.64	29.46	NA	NA
S-7	1/26/1995	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	40.10	7.75	32.35	NA	4.6
S-7	4/21/1995	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	40.10	8.51	31.59	NA	NA
S-7	7/28/1995	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	40.10	10.20	29.90	NA	3
S-7	10/31/1995	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	40.10	10.86	29.24	NA	4.9
S-7	1/10/1996	<50	<0.5	2	<0.5	2.6	NA	NA	NA	NA	NA	NA	40.10	10.33	29.77	NA	7.6
S-7	4/25/1996	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NA	NA	NA	NA	40.10	9.13	30.97	NA	6.2
S-7	7/23/1996	<50	<0.5	<0.5	<0.5	<0.5	14	NA	NA	NA	NA	NA	40.10	10.18	29.92	NA	3.7
S-7	12/10/1996	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NA	NA	NA	NA	40.10	9.04	31.06	NA	4.6
S-7	2/20/1997	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	NA	NA	NA	40.10	9.60	30.50	NA	5
S-7	5/22/1997	<50	1.3	<0.50	<0.50	<0.50	<0.50	5.5	NA	NA	NA	NA	40.10	10.63	29.47	NA	0.8
S-7	8/22/1997	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	NA	NA	NA	NA	40.10	10.95	29.15	NA	2.6
S-7	11/3/1997	<50	2.2	1.7	0.58	3.4	<2.5	NA	NA	NA	NA	NA	40.10	11.29	28.81	NA	2.6

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**999 San Pablo Avenue**  
**Albany, CA**

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	DO Reading (ppm)
S-7	2/20/1998	350	23	13	14	42	3.8	NA	NA	NA	NA	NA	40.10	7.73	32.37	NA	4.6
S-7	5/18/1998	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	NA	NA	NA	NA	40.10	10.29	29.81	NA	4.4
S-7	8/20/1998	Well inaccessible	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.10	11.00	29.10	NA	5.4
S-7	11/6/1998	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	NA	NA	NA	NA	40.10	11.19	28.91	NA	5.2
S-7	2/16/1999	Well inaccessible	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.10	NA	NA	NA	NA
S-7	5/28/1999	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	NA	NA	NA	NA	NA	40.10	9.76	30.34	NA	2.7
S-7	8/24/1999	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	NA	NA	NA	NA	40.10	10.61	29.49	NA	2.1
S-7	11/16/1999	<50.0	<0.500	<0.500	<0.500	<0.500	3.68	NA	NA	NA	NA	NA	40.10	10.90	29.20	NA	2.3
S-7	2/2/2000	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	NA	NA	NA	NA	NA	40.10	10.30	29.80	NA	2.1
S-7	5/9/2000	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	NA	NA	NA	NA	40.10	10.25	29.85	NA	2.7
S-7	8/3/2000	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	NA	NA	NA	NA	40.10	10.65	29.45	NA	2.5
S-7	11/15/2000	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	NA	NA	NA	NA	40.10	10.53	29.57	NA	4.6
S-7	2/14/2001	Well inaccessible	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.10	NA	NA	NA	NA
S-7	5/31/2001	<50	<0.50	<0.50	<0.50	0.77	NA	4.6	NA	NA	NA	NA	40.10	9.46	30.64	NA	2.1
S-7	8/15/2001	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	40.10	10.93	29.17	NA	2.0
S-7	12/31/2001	<50	<0.50	<0.50	<0.50	<0.50	NA	6.0	NA	NA	NA	NA	40.10	9.14	30.96	NA	3.0
S-7	2/6/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	40.10	8.61	31.49	NA	3.2
S-7	6/4/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	40.10	10.41	29.69	NA	0.9
S-7	7/25/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	39.91	10.37	29.54	NA	1.1
S-7	11/27/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	39.91	10.52	29.39	NA	NA
S-7	1/30/2003	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	39.91	9.38	30.53	NA	NA
S-7	6/3/2003	<50	<0.50	<0.50	<0.50	<1.0	NA	0.72	NA	NA	NA	NA	39.91	10.18	29.73	NA	NA
S-7	8/8/2003	<50	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	39.91	10.43	29.48	NA	NA
S-7	11/13/2003	<50	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	39.91	10.39	29.52	NA	NA
S-7	2/4/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	39.91	9.17	30.74	NA	NA
S-7	5/12/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	39.91	10.20	29.71	NA	NA
S-7	8/23/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	39.72 f	10.53	29.19	NA	NA
S-7	12/1/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	39.72	10.36	29.36	NA	NA

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**999 San Pablo Avenue**  
**Albany, CA**

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	DO Reading (ppm)
S-7	2/7/2005	<50	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	39.72	8.76	30.94	NA	NA
S-7	5/2/2005	<50	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	39.72	9.46	30.26	NA	NA
S-8	5/10/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.52	10.85	29.67	NA	NA
S-8	5/12/2004	<1,300	<13	<13	<13	<25	NA	2,500	NA	NA	NA	NA	40.52	10.95	29.57	NA	NA
S-8	8/23/2004	1,300	15	<13	<13	<25	NA	2,500	<50	<50	570	40.52	11.40	29.12	NA	NA	
S-8	12/1/2004	1,400 h	<13	<13	<13	<25	NA	2,700	NA	NA	NA	NA	40.52	11.10	29.42	NA	NA
S-8	2/7/2005	6,400	240	27	290	100	NA	370	NA	NA	NA	NA	40.52	10.22	30.30	NA	NA
S-8	5/2/2005	6,300	160	25	200	74	NA	190	NA	NA	NA	NA	40.52	10.05	30.47	NA	NA
S-9	5/10/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39.72	10.34	29.38	NA	NA
S-9	5/12/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	39.72	10.42	29.30	NA	NA
S-9	8/23/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	39.72	11.32	28.40	NA	NA
S-9	12/1/2004	Unable to locate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39.72	NA	NA	NA	NA
S-9	2/7/2005	<50	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	39.72	8.74	30.98	NA	NA
S-9	5/2/2005	Well inaccessible	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39.72	NA	NA	NA	NA

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**999 San Pablo Avenue**  
**Albany, CA**

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	DO Reading (ppm)
---------	------	----------------	-------------	-------------	-------------	-------------	------------------------	------------------------	----------------	----------------	----------------	---------------	--------------	----------------------------	--------------------------	---------------------------	------------------------

Abbreviations:

TPPH = Total petroleum hydrocarbons as gasoline by EPA Method 8260B; prior to May 31, 2001, analyzed by EPA Method 8015.

BTEX = Benzene, toluene, ethylbenzene, xylenes by EPA Method 8260B; prior to May 31, 2001, analyzed by EPA Method 8020.

MTBE = Methyl tertiary butyl ether

DIPE = Di-isopropyl ether, analyzed by EPA Method 8260B

ETBE = Ethyl tertiary butyl ether, analyzed by EPA Method 8260B

TAME = Tertiary amyl methyl ether, analyzed by EPA Method 8260B

TBA = Tertiary butyl alcohol, analyzed by EPA Method 8260B

TOC = Top of Casing Elevation

TOB = Top of Wellbox Elevation

SPH = Separate-Phase Hydrocarbons

GW = Groundwater

DO = Dissolved Oxygen

ug/L = Parts per billion

mg/L = Parts per million

MSL = Mean sea level

ft. = Feet

ppm = Parts per million

<n = Below detection limit

(D) = Duplicate sample

NA = Not applicable

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**999 San Pablo Avenue**  
**Albany, CA**

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	DO Reading (ppm)
---------	------	----------------	-------------	-------------	-------------	-------------	------------------------	------------------------	----------------	----------------	----------------	---------------	--------------	----------------------------	--------------------------	---------------------------	------------------------

Notes:

a = Sample analyzed for total dissolved solids (450 mg/L).

b = Surrogate recovery outside QC limits due to matrix effect.

c = Chromatogram pattern indicated an unidentified hydrocarbon.

d = This sample analyzed outside of EPA recommended hold time.

e = Concentration is an estimate value above the linear quantitation range.

f = Top of casing elevation lowered 0.19 feet on June 22, 2004 due to wellhead maintenance.

g = Hydrocarbon reported does not match the laboratory standard.

h = Quantity of unknown hydrocarbon(s) in sample based on gasoline.

When separate-phase hydrocarbons are present, ground water elevation is adjusted using the relation:

Corrected ground water elevation = Top-of-casing elevation - depth to water + (0.8 x hydrocarbon thickness).

Ownership of well S-5 is being transferred to Arco.

Beginning July 25, 2002 depth to waters referenced to Top of Casing.

Site surveyed January 9, 2002 by Virgil Chavez Land Surveying of Vallejo, CA.

Wells S-8 and S-9 surveyed May 11, 2004 by Virgil Chavez Land Surveying of Vallejo, CA.

**ATTACHMENT E**

**ERROR CHECK REPORTS AND EDF/GEOWELL SUBMITTAL  
CONFIRMATIONS**

## Electronic Submittal Information

[Main Menu](#) | [View/Add Facilities](#) | [Upload EDD](#) | [Check EDD](#)

### SUCCESSFUL GEO\_WELL CHECK - NO ERRORS

ORGANIZATION NAME: URS Corporation-Oakland Office  
USER NAME: URSCORP-OAKLAND  
DATE CHECKED: 5/20/2005 10:12:49 AM

**Processing is complete. No errors were found!  
You may now proceed to the [upload](#) page.**

[Back to Main Menu](#)

Logged in as URSCORP-OAKLAND (CONTRACTOR)

[CONTACT SITE ADMINISTRATOR.](#)

## Electronic Submittal Information

[Main Menu](#) | [View/Add Facilities](#) | [Upload EDD](#) | [Check EDD](#)

### UPLOADING A GEO\_WELL FILE

**Processing is complete. No errors were found!  
Your file has been successfully submitted!**

**Submittal Title:** 2Q 2005 QMR Geo\_Well Site  
2035

**Submittal Date/Time:** 5/20/2005 10:15:28 AM

**Confirmation Number:** 2381988346

[Back to Main Menu](#)

Logged in as URSCORP-OAKLAND  
(CONTRACTOR)

CONTACT SITE [ADMINISTRATOR](#).

## Electronic Submittal Information

[Main Menu](#) | [View/Add Facilities](#) | [Upload EDD](#) | [Check EDD](#)

### SUCCESSFUL EDF CHECK - NO ERRORS

<u>ORGANIZATION NAME:</u>	URS Corporation-Oakland Office
<u>USER NAME:</u>	URSCORP-OAKLAND
<u>DATE CHECKED:</u>	5/20/2005 10:14:27 AM
<u>GLOBAL ID:</u>	T0600100081
<u>FILE uploaded:</u>	ARCO#2035-EDF-MOE0064.zip

No errors were found in your EDF upload file.

If you want to submit this file to the SWRCB, choose the "Upload EDD" option in the above menu and follow the instructions.

When you complete the submittal process, you will be given a confirmation number for your submittal.

[Click here](#) to view the detections report for this upload.

<b>ARCO # 02035</b> 1001 SAN PABLO AVE ALBANY, CA 94706	<b>Regional Board - Case #: 01-0088</b> SAN FRANCISCO BAY RWQCB (REGION 2) - (BG)
	<b>Local Agency (lead agency) - Case #:</b> <b>RO0000100</b> ALAMEDA COUNTY LOP - (SOS)

### SAMPLE DETECTIONS REPORT

# FIELD POINTS SAMPLED	6
# FIELD POINTS WITH DETECTIONS	6
# FIELD POINTS WITH WATER SAMPLE DETECTIONS ABOVE MCL	4
SAMPLE MATRIX TYPES	WATER

### METHOD QA/QC REPORT

METHODS USED	8260FA
TESTED FOR REQUIRED ANALYTES?	N
MISSING PARAMETERS NOT TESTED:	
- 8260FA REQUIRES DBFM TO BE TESTED	
- 8260FA REQUIRES BR4FBZ TO BE TESTED	
- 8260FA REQUIRES BZMED8 TO BE TESTED	
LAB NOTE DATA QUALIFIERS	Y

### QA/QC FOR 8021/8260 SERIES SAMPLES

TECHNICAL HOLDING TIME VIOLATIONS	0
METHOD HOLDING TIME VIOLATIONS	0
LAB BLANK DETECTIONS ABOVE REPORTING DETECTION LIMIT	0
LAB BLANK DETECTIONS	0
DO ALL BATCHES WITH THE 8021/8260 SERIES INCLUDE THE FOLLOWING?	
- LAB METHOD BLANK	Y
- MATRIX SPIKE	Y

- MATRIX SPIKE DUPLICATE	Y
- BLANK SPIKE	Y
- SURROGATE SPIKE	Y

**WATER SAMPLES FOR 8021/8260 SERIES**

MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135%	Y
MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30%	Y
SURROGATE SPIKES % RECOVERY BETWEEN 85-115%	Y
BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130%	Y

**SOIL SAMPLES FOR 8021/8260 SERIES**

MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135%	n/a
MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30%	n/a
SURROGATE SPIKES % RECOVERY BETWEEN 70-125%	n/a
BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130%	n/a

**FIELD QC SAMPLES**

<u>SAMPLE</u>	<u>COLLECTED</u>	<u>DETECTIONS &gt; REPDL</u>
QCTB SAMPLES	N	0
QCBE SAMPLES	N	0
QCAB SAMPLES	N	0

Logged in as URSCORP-OAKLAND (CONTRACTOR)

CONTACT SITE ADMINISTRATOR.

## Electronic Submittal Information

[Main Menu](#) | [View/Add Facilities](#) | [Upload EDD](#) | [Check EDD](#)

Your EDF file has been successfully uploaded!

**Confirmation Number:** 7477487564

**Date/Time of Submittal:** 5/20/2005 10:16:40 AM

**Facility Global ID:** T0600100081

**Facility Name:** ARCO # 02035

**Submittal Title:** 2Q 2005 QMR EDF Site 2035

**Submittal Type:** GW Monitoring Report

[Click here](#) to view the detections report for this upload.

<b>ARCO # 02035</b> 1001 SAN PABLO AVE ALBANY, CA 94706	<b>Regional Board - Case #:</b> 01-0088 SAN FRANCISCO BAY RWQCB (REGION 2) - (BG)
	<b>Local Agency (lead agency) - Case #:</b> RO0000100 ALAMEDA COUNTY LOP - (SOS)

<b>CONF #</b> 7477487564	<b>TITLE</b> 2Q 2005 QMR EDF Site 2035	<b>QUARTER</b> Q2 2005
<b>SUBMITTED BY</b> Srijesh Thapa	<b>SUBMIT DATE</b> 5/20/2005	<b>STATUS</b> PENDING REVIEW

### **SAMPLE DETECTIONS REPORT**

# FIELD POINTS SAMPLED	6
# FIELD POINTS WITH DETECTIONS	6
# FIELD POINTS WITH WATER SAMPLE DETECTIONS ABOVE MCL	4
SAMPLE MATRIX TYPES	WATER

### **METHOD QA/QC REPORT**

METHODS USED	8260FA
TESTED FOR REQUIRED ANALYTE?	N
MISSING PARAMETERS NOT TESTED:	
- 8260FA REQUIRES DBFM TO BE TESTED	
- 8260FA REQUIRES BR4FBZ TO BE TESTED	
- 8260FA REQUIRES BZMED8 TO BE TESTED	
LAB NOTE DATA QUALIFIERS	Y

### **QA/QC FOR 8021/8260 SERIES SAMPLES**

TECHNICAL HOLDING TIME VIOLATIONS	0
METHOD HOLDING TIME VIOLATIONS	0
LAB BLANK DETECTIONS ABOVE REPORTING DETECTION LIMIT	0
LAB BLANK DETECTIONS	0
DO ALL BATCHES WITH THE 8021/8260 SERIES INCLUDE THE FOLLOWING?	
- LAB METHOD BLANK	Y
- MATRIX SPIKE	Y
- MATRIX SPIKE DUPLICATE	Y
- BLANK SPIKE	Y
- SURROGATE SPIKE	Y

### **WATER SAMPLES FOR 8021/8260 SERIES**

MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135%	Y
---	---

MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30%	Y
SURROGATE SPIKES % RECOVERY BETWEEN 85-115%	Y
BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130%	Y

**SOIL SAMPLES FOR 8021/8260 SERIES**

MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135%	n/a
MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30%	n/a
SURROGATE SPIKES % RECOVERY BETWEEN 70-125%	n/a
BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130%	n/a

**FIELD QC SAMPLES**

<u>SAMPLE</u>	<u>COLLECTED</u>	<u>DETECTIONS &gt; REPDL</u>
QCTB SAMPLES	N	0
QCCEB SAMPLES	N	0
QCAB SAMPLES	N	0

Logged in as URSCORP-OAKLAND (CONTRACTOR)

CONTACT SITE ADMINISTRATOR.